

# RAILWAY AGE

MAR 12 1948

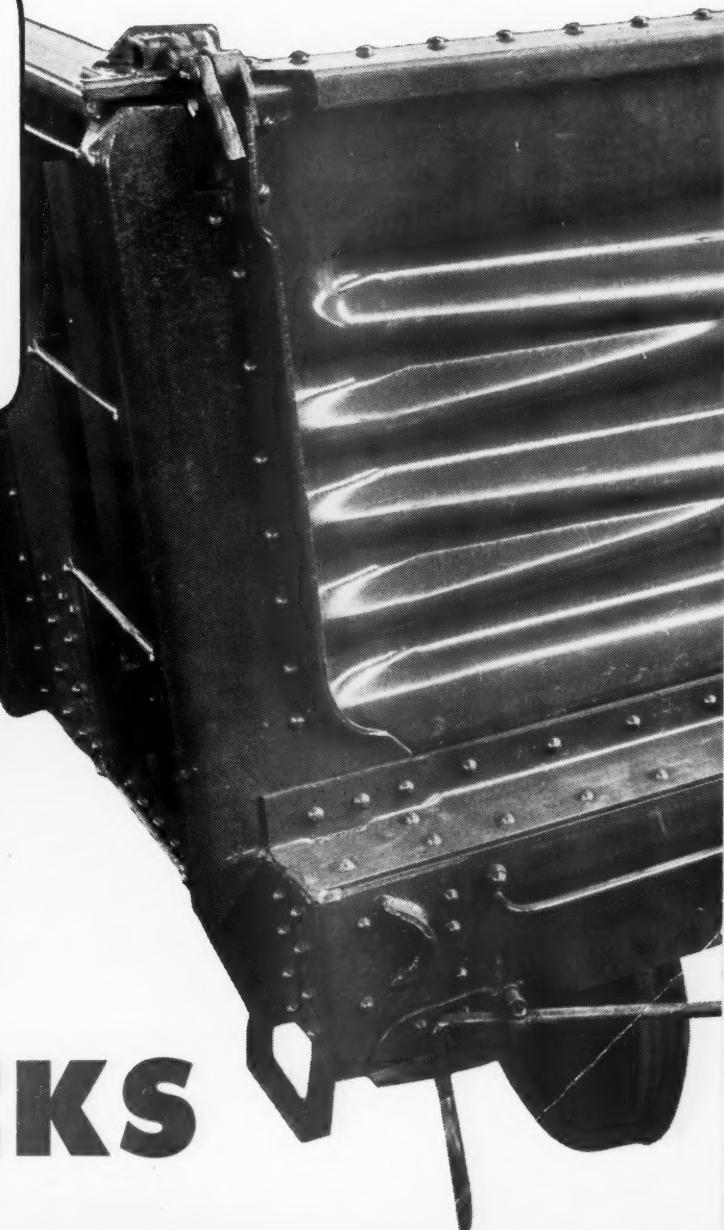
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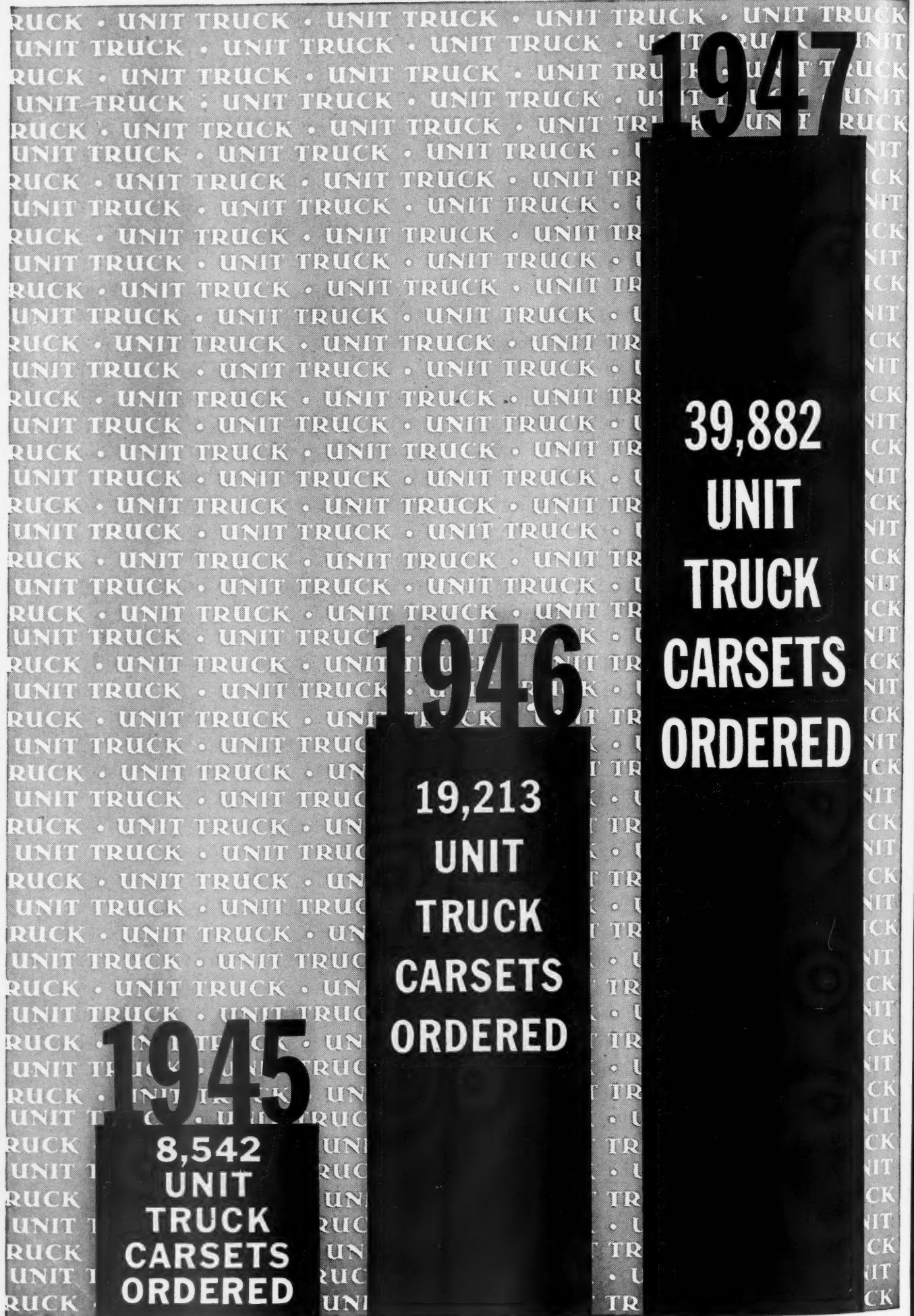
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# RAILWAY AGE

With which are incorporated the Railway Review, the Railway Gazette, and the Railway-Age Gazette. Name registered in U. S. Patent Office.

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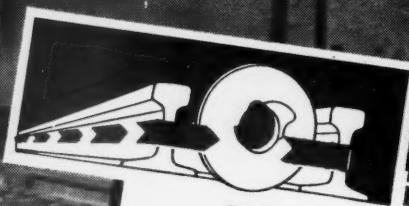
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## WEEK AT A GLANCE

**JACKSON HEARS FROM BOWMAN:** The Chesapeake & Ohio management and the Federation for Railway Progress are convinced, according to C. & O. President Bowman, that American railroads are quite vulnerable to socialization and quite dilatory in initiating and pursuing aggressive measures to meet this threat to their survival as a "going, solvent, vigorous part of a private enterprise system." In this conviction the Young interests have cut loose from the Association of American Railroads and undertaken an independent program shaped, as they see it, in the light of an "economic statesmanship" they find lacking in the A.A.R. This is the philosophy stated in Mr. Bowman's detailed reply to the communications of George S. Jackson, a C. & O. stockholder whose questions about that road's public relations and advertising activities and its affiliation with the F.R.P. were reported in our January 31 issue. A summary of Mr. Bowman's observations appears herein (page 46).

**SANTA FE FREIGHTHOUSE:** The enlargement of the Santa Fe's Los Angeles freighthouse was undertaken after careful consideration of the circumstances under which it would operate, and the plans were developed so that these operations—not only within the building but in the placing and loading and unloading of trucks and cars—could proceed with the utmost efficiency. The result is a lay-out, described in one of this issue's feature articles, with off-street maneuvering space for trucks, with lanes laid out for platform tractors to move about without interference, and with conveniently placed talk-back loudspeakers.

**CAR-BUILDERS NEED STEEL:** When a program to provide steel for freight-car building is announced in terms of cars per month, as was done last year, it makes a lot of difference, as one of our editorials observes, just what that monthly quota means. It is one thing, in terms of cars completed, if it means that the steel suppliers are undertaking to provide the tonnage, properly distributed among components, which the entire program requires. It means another thing if they are merely undertaking to provide a specified quantity in each separate month, without obligation to increase allotments in succeeding months to offset any failures to meet quotas.

**LOOKING AHEAD:** The way the railroads' future looks to railroad men—particularly in the fields of operations, equipment and maintenance—has been put down in black and white in one of the reports produced by the Railroad Committee for the Study of Transportation which functioned for several years under the direction of Judge Fletcher. This group expects steady progress rather than startling revolutions; it expects the steam locomotive to continue for some time to be the backbone of railroad motive power (but not necessarily the traditional reciprocating engine); and it expects large extensions of train communication systems, cab signals, coded track circuits, and centralized traffic control. Equally significant developments are looked for, as

our summary of the report indicates (page 50), in the creation of sturdier, more economical and easier riding track.

**MEADOW LANDS FOUNDRY:** Two of American Brake Shoe's older plants in the Pittsburgh area have been closed as a result of completion at Meadow Lands, a suburb, of a new plant which incorporates a foundry for the production of brake shoes and a press room for making brake shoe parts. The arrangement and construction of the new plant are pictured and described in this issue.

**SAFER HANDLING FOR L.C.L.:** Bulkheads and segregation gates are regular equipment for the handling of l.c.l. on the Union Pacific, and that road's transfer platforms and freighthouses use them as standard practice. As an illustrated article in this issue explains, loss and damage charges against this class of traffic have been materially reduced with these devices, a result that shows up in better relations with customers as well as on the ledger.

**ROLLED-STEEL RESEARCH:** A paper recently presented by two Carnegie-Illinois Steel technicians, abstracted herein, Carnegie-Illinois Steel technicians, abstracted in this issue, explains the procedure by which they are carrying out studies of various types of surface defects that appear in finished rolled-steel products. Two broad classes of flaws were subjected to these investigations: (1) mechanical defects resulting from rolling operations; and (2) steel defects present in the ingot or semi-finished state.

**DYNAMITE:** The Interstate Commerce Commission has brought up again the superficially attractive idea that the railroads ought to save money by consolidation of terminals. Our leading editorial points out that there are other factors than immediate bookkeeping savings to be considered in determining, as a matter of long-range policy—and any such wholesale operation as doing over the terminal facilities of a large city or port or interchange must be a long-range undertaking—whether or not such consolidation actually produces economy. When Mr. Eastman was federal coordinator a similar recommendation was made. If it had been carried out, it is extremely doubtful if railroad terminals would have been adequate to handle the wartime traffic.

**FLOATING WHITE ELEPHANT:** Congress is trying to figure out what to do with the Federal Barge Lines, that lamentably unprofitable "yardstick" operation that was so blithely launched as the last word in "cheap" transportation. The testimony of the railroads, and of some of the beneficiaries of the subsidized transportation these barges have afforded, is summarized in the news columns in this issue.

**THE WEATHER**  
Today: Increasing cloudiness in afternoon, with snow or sleet late at night; highest temperature near 25; moderate winds.

Tomorrow: Sleet or freezing rain, followed by clearing and colder. Temperature yesterday: Max., 45; min., 19. Detailed Report and Map — Page 31.

(Your daily paper)

## SLEET OR FREEZING WEATHER PREDICTED?

After first cost, maintenance seems to be the major item for consideration. Line wire failures invariably occur at a time when weather, usually sleet, and icy conditions make repairs a very difficult and hazardous procedure.

*Signalman's Journal.*

## OKOPRENE-PROTECTED OKONITE CABLE WITHSTANDS IT

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## TERMINAL MERGERS SOLVE NO PROBLEMS

In its annual report for 1947 the Interstate Commerce Commission indicates a belief that the railroads can save large sums of money by unifying their terminal facilities. The implication is that this kind of cost-cutting would be a desirable alternative to rate increases to meet present high costs of operation.

No one will deny that terminal operating costs have, since 1939, increased more than other category. Unfortunately, the increase is not "overhead," but is related largely to the unit of production. The railroads have been able to compensate for higher labor costs with larger units in line-haul, but they do not have the same opportunity in terminals. Many believe, for example, with regard to less-carload station and transfer costs, "the more freight you handle, the more money you lose." The same is probably true of the yarding of carload shipments, though to a lesser extent.

### More Work May Mean More Costs

One important reason why terminal costs have risen disproportionately is that labor is a greater element in the cost of the work than elsewhere on the railroad. Further, in the case of freight house platform labor, at least, the *percentage* increase in the wage scale has been greater than for most

other railroad workers, with the notable exception of track maintenance forces. A second important reason is that the volume of traffic has clearly outgrown the capacity of many terminal facilities and the working force of most of them. For every freight house, classification yard, and other facility there exists an "optimum" traffic level. Up to that point increases in production generally result in a decrease in cost per unit of work. That is as it should be. But beyond this "optimum" or critical point, increase in traffic may not only fail to reduce unit costs, but may actually *increase* them.

A congested yard is a costly exercise in applied economics. The number of handlings per car is increased and the time accorded each handling similarly expanded. Errors and damage to lading multiply. Since efficiency is lowered while the load continues high, the supply of experienced yard crews runs low and it is necessary to pile overtime on overtime. At the same time, the terminal delays of road and transfer crews resulting from the congestion bring a crop of costly penalty payments and unproductive equipment tie-ups. An inadequate freight house or transfer exhibits similar characteristics. Tonnage per man goes down as overall volume goes up, in almost direct proportion to the degree of confusion existing.

The solution to the problem of high costs in

terminal operations must concern itself with the causes. These causes are: (1) disproportionately high labor costs; and (2) congestion of inadequate facilities resulting from high volume. They would seem to suggest two practicable attacks on the problem: (1) increased mechanization, to reduce the need for so much direct labor; and (2) modernization and expansion of terminal facilities, to raise the point of "optimum" traffic volume. It is not clear how, or even that, consolidation of terminal facilities would accomplish either of these aims. It is one thing for the federal coordinator, in a time of deep depression and low traffic volume, to urge widespread terminal unification for the purpose of getting rid of excess facilities and thereby save money by decreasing the cost per unit of work done. It is quite another matter to urge further unification when a major cause of high costs is a level of traffic which exceeds the economical capacity of existing plant.

Consolidation of facilities would remedy today's terminal ills only if it promised to produce modern, mechanized installations with a greater overall capacity than now exists in all of the separately-owned facilities to which they would succeed. Furthermore, the value of the unified facilities would be in almost direct ratio to the speed with which they are made available for use. The traffic is at hand and will not wait for long-term negotiations and plans.

#### **Consolidation No Solution**

To stipulate the conditions is to resolve the question. There is little reason indeed to believe that consolidation of terminals will deal efficiently with terminal costs. On the contrary, there is good reason to believe that entrance by the roads into a unification campaign would actually obstruct the solution of the problem. That solution, as stated, is mechanization, modernization and expansion of facilities, which steps should be taken with all possible dispatch.

A large number of railroads are now engaged in unprecedented programs in this direction, with entirely new and modern retarder hump yards well under way, new freight stations going up, and lift-trucks and other mechanical platform devices replacing hand-trucking of merchandise freight. Should necessary projects of this type be shelved while management takes time out for prolonged negotiations on terminal unification? Should a railroad be inhibited from even *planning* costly improvements because of the fear that the latter will soon be consolidated into a communal property and benefit its competitors which have made no such outlays—or that the improvements will be abandoned at a great loss because they do not fit into whatever scheme of unification changes to emerge?

It is noteworthy that, in the depth of the depression of the Thirties, when terminal unification would have produced at least a few practical benefits (at the level of traffic then existing, it must be emphasized), the opposition of railroads and railroad labor, together with certain shippers, was so strong as to defeat the voluntary program established by the co-ordinator. Charging that "the railroad machinery for handling these matters is apparently on dead center," Coordinator Eastman, on February 1, 1936, announced the beginning of "outside pressure from government authority" to promote unification schemes, and proposed to issue orders requiring unification at 11 medium-size cities to serve as "very simple" pilot projects out of a total of more than 5000 terminal situations studied by committees under the coordinator. These projects were to be only a beginning; the coordinator made it clear he was after bigger game.

#### **Narrow Escape from Catastrophe**

The coordinator went out of business a few months later. Only a few of the terminal schemes considered during his administration went into effect, and they were minor in extent. The country may consider itself fortunate to have escaped fruition of the major terminal unification plans drawn up under his aegis. Had they succeeded, the shrunken terminal facilities resulting would have handicapped the railroads to the point of breakdown in dealing with the high level of traffic in the last three-quarter decade.

Even as wise and well-intentioned a public servant as Mr. Eastman forgot that "change ruleth the universe". He tried to effect a *permanent* change in railroad plant to satisfy a *temporary* problem. Now along comes the commission with a scheme of a similar nature, which, if followed, would solve no problems at all, either short-term or long.

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## **INDEX TO VOLUME 123**

The indexes to the latest volume of *Railway Age*, July to December, 1947, are now ready for distribution, and copies may be had by those subscribers desiring them.

Requests should be addressed to the Circulation Department, *Railway Age*, 30 Church Street, New York 7.

Subscribers who have in previous years made application for the index need not apply again; they will continue to receive it as long as they continue to subscribe.

## GETTING THE MOST OUT OF CROSSING PROTECTION

Highway crossing protection frequently can be planned to provide, not only increased safety for highway traffic, but increased train speeds and economies in operating expenses as well. The extent to which these benefits are accomplished depends to a considerable degree on the authority and support given to the railroad officer who deals with state and local authorities.

In earlier days, the assignment of watchmen at crossings was deemed the best and most economical means of protection at heavily-traveled streets. Subsequently, the installation of manually operated gates, with a gateman for each crossing, was adopted as an improvement. Because of the high operating expenses involved, this form of protection was practicable at only the busiest streets, the others being protected by fixed signs. Consequently, drastic train-speed restrictions were established by many local governments.

At numerous outlying highway crossings, the effectiveness of protection afforded by standard flashing-light signals and electrically operated gates, controlled automatically by approaching trains, has long been evident. Such signals and gates can offer similar protection at crossings in towns and cities. An important advantage, from the standpoint of the users of the crossings, is the increased safety which is provided by uniform types of protection at all crossings, and further, that the protection is in service day and night, under automatic control which eliminates man failures.

For such a project to be practicable, as applying uniformly to all the crossings in a town, it is often necessary that crossings be eliminated at some of the streets which are used the least. For example, through one town a railroad had 12 street crossings—one protected by flashing-light signals, four protected by air-gates in service 17 hours daily, two protected by flagmen 10 hours daily, and the remaining five protected by crossbuck signs. Following negotiations with city, state and railroad representatives, flashing-light signals with short-arm electric gates were installed at seven crossings, and the remaining five were closed. The highway traffic was given increased protection and since the new signals and gates were in service 24 hours at all crossings, the restrictions on train speeds were removed.

Another consideration of importance is that railroad policy in its approach to the authorities in a given city, be uniform and consistent. For example, one large railroad vested full authority for such matters in its signal engineer, giving him power to negotiate with city, state and federal representatives, and to say definitely what the railroad would

do in the planning and installation of the protective devices. As a result, this road has made excellent progress in improving safety and reducing operating expenses for crossing protection in numerous towns.

Elsewhere, with insufficient authority given to any one officer to enter into negotiations with the local authorities, progress has been slow or actually non-existent.

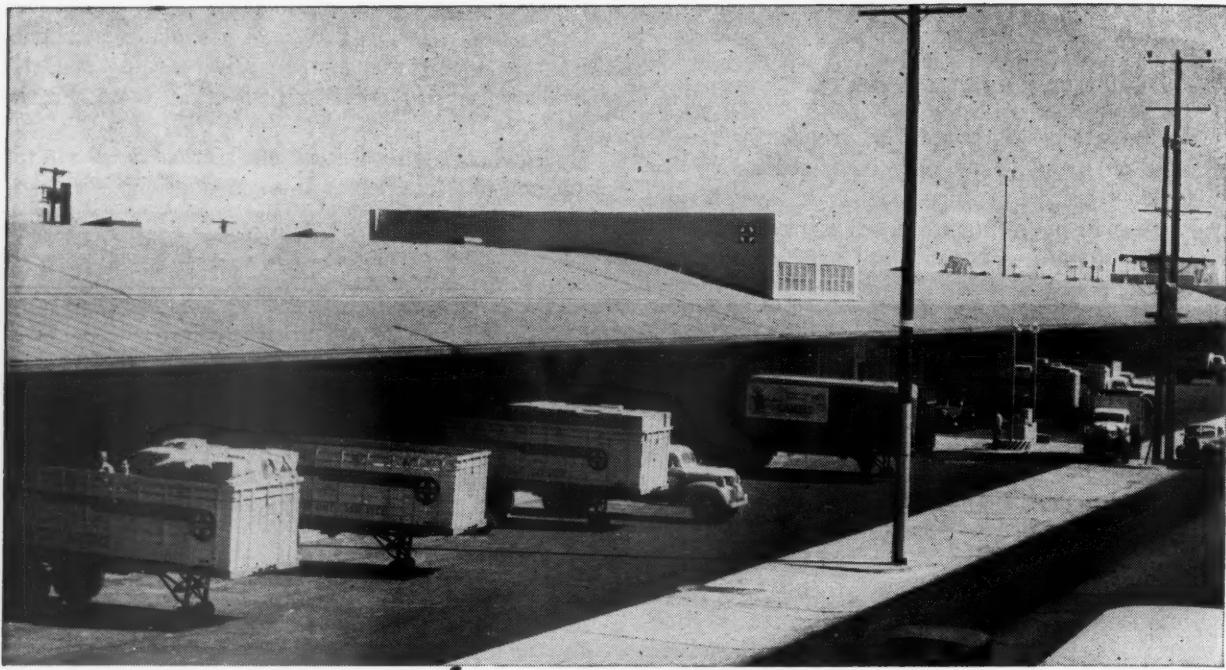
## FREIGHT CARS IN 1948

In looking forward to the prospects for new freight cars during 1948 one of the first questions to be asked is why did the number of new freight cars built during 1947 fail to meet the monthly programs, first of 8,000 cars a month and then of 10,000 cars a month, established during the year. The answer, stated in its simplest overall terms, was lack of sufficient steel in balanced car sets.

In attempting to find, in turn, the reason for the lack of sufficient steel in balanced car sets in the plants of the builders, one fact is pertinent: these programs, as they were set up and operated, were not programs for the year, but were on a month-by-month basis. When, for instance, a failure to deliver the necessary steel for one month's program occurred, the shortage was never made up. Undelivered quotas were generally cancelled at the end of the month. Another pertinent fact is that steel for car building is not a fluid commodity which moves freely from a point of surplus to a point of shortage. Orders for steel are generally placed by the car builders to the specifications of the purchaser.

Hence, an allocation of steel barely sufficient to meet a program can almost never meet that program because of this lack of fluidity which is sure to cause some percentage of failure to provide material in car sets completely balanced at each car-building plant.

It is worth the consideration of all parties involved in the cooperative movement of meeting a program of car building for the railroads during 1948 to establish an annual program rather than a monthly program. In this way at least some of the failures resulting from lack of fluidity might be ameliorated, because a failure of steel deliveries or of production in the plants of the car builders during any single month would be merely a delay and not a final failure to meet a program for each poor month. Even without a more liberal allowance of steel per car for the program, more steel would be delivered and more cars built at the end of the year on an annual program than can possibly be built under a program set up as was that of 1947.



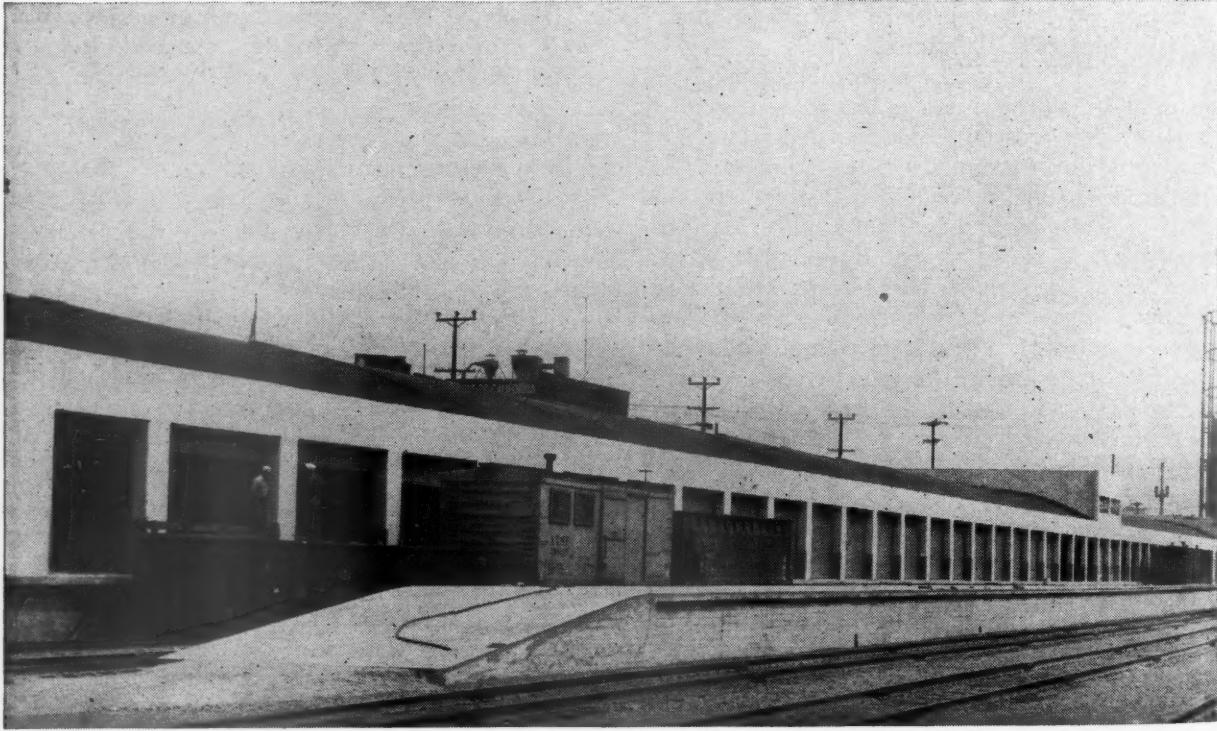
*All photographs courtesy Santa Fe Railway*

Street side of the new freighthouse, looking south on Santa Fe avenue. Note gasoline service station for pick-up and delivery trucks

By G. W. VARNUM  
Office Engineer  
Atchison, Topeka & Santa Fe  
Coast Lines  
Los Angeles, Cal.

## THIS NEW FREIGHTHOUSE HAS EVERYTHING

**Large structure built by Santa Fe at Los Angeles has many features to expedite the handling of lading and to reduce loss and damage**



This view, taken prior to completion of the freighthouse, shows the track side of the building and the concrete island platform. Overhang along side of platform protects plug-in receptacles

Increased business activity in Southern California, starting in 1944 and 1945, indicated the need for additional freighthouse space for the Atchison, Topeka & Santa Fe at Los Angeles. Also the existing freighthouse, one inbound and one outbound, did not serve too well for efficient and economical handling of freight under the pick-up and delivery system which had come into effect. Consequently it was decided to build a new modern freighthouse that would combine under one roof the handling of both inbound and outbound freight and, in connection therewith, make ample provision for pick-up and delivery service. The new house does not provide office space for the general office forces of the agent; hence the old houses are retained for this and other purposes.

Pick-up and delivery service is rendered by the Santa Fe Transportation Company, Rex division, which has a fleet of 30 trucks, 8 trailers and 14 semi-trailers. It provides a highly efficient railroad-highway coordinated system for the expeditious handling of freight from shipper to freighthouse and vice versa.

The new freighthouse was built on the east side of Santa Fe avenue, extending between First and Third streets, and is situated in the heart of the industrial district. The design of the new structure embodies many features for promoting efficient, expeditious and economical operation, the foremost objectives being that of furnishing the best possible service to shippers.

The following table shows the relationship that has prevailed between the freighthouse floor area of the Santa Fe at Los Angeles and the city's population.

Year	Floor Area	Population
1888.....	5,964 sq. ft.	42,551
1902.....	16,968 "	125,000
1908.....	54,000 "	327,000
1915.....	102,000 "	475,367
1947.....	150,900 "	1,805,687

It will be noted that the ratio of square feet of floor space to the population has remained at about 1 to 8.

The new freighthouse is a semi-fireproof structure, concrete to the roof, 815 ft. long and 60 ft. wide. It has reinforced-concrete foundations, floors, and exterior walls, with wood roof-trusses and wood roof-sheathing covered with four-ply built-up roofing.

To expedite the servicing and fueling of Rex Division trucks, a gasoline service station has been provided at the mid-point of the new freighthouse in a driveway paralleling the street side, at which point trucks can be completely serviced. Gasoline is pumped from a 10,000-gal. underground storage tank, and lubricating oil is supplied from a 1,000-gal. storage tank, also underground. An air compressor, driven by a 3-hp. electric motor, delivers 135 lb. of air to an air receiver for inflating tires of large trucks. Air and water are also piped the full length of the street side of the building with outlets at convenient intervals.

### Fronts on Main Artery

The long dimension of new house fronts on Santa Fe avenue, which is a main north and south artery through the city. Due to heavy trucking on this thoroughfare, it was decided to set the house back 37½ ft. from the property line to provide tailboard or parking space for trucks so that platform work can be expedited and hauls on the freighthouse floor to cars reduced to a minimum. Also, deliveries are expedited, permitting the afternoon rush to be handled without disturbing the flow of traffic on Santa Fe avenue.

Paving in Santa Fe avenue extended to the curb line. In the construction of the new house, it was necessary to remove an existing concrete sidewalk, 12 ft. wide, and replace it with concrete paving, 6 in. thick. The area between the property line and the house is paved with six inches of asphaltic concrete, except that in the vicinity of the filling station an area 30 ft. wide is paved with cement concrete to prevent deterioration from waste gasoline and oil.

A metal-frame canopy, 12½ ft. wide, covered with protected metal, extends the full length of the building on the street side to protect the unloading of trucks during inclement weather. Lights are provided under the canopy to facilitate unloading operations after dark. In addition, plug-ins are spaced at convenient intervals along this platform so that, using extension cords, lights can be placed inside of trucks if required. Plugs are also spaced along the track side of the house and along the island platform so that extension cords can be used to place lights inside of cars.

The floor level of the house was established four feet above both the driveway on the street side and the top of rail on the truck side. The building is served by two tracks for its entire length. Beyond these there is a concrete island dock, 15 ft. wide, and on the other side of this platform there are two additional full-length tracks, providing for a total capacity of 64 cars. Cars can be spotted on the house tracks with doors opposite each other and, by placing metal gangplanks between them, trucking operations can be carried on through the house and the cars, and across the island platforms to the most distant track. A motor-operated lift bridge a few feet north of the center of the house provides further access between the house and the island platform. This lift bridge is of structural steel with a wood deck 15 ft. wide.

Floodlights, mounted on steel towers 60 ft. high, have been installed at each end of the island platform, illuminating the entire length of the operating area. In other words, the platform is equipped for 24-hr. operation if necessary. Offices in the building have fluorescent lighting, and the interior, or floor space, of the house is illuminated with 200-watt lamps in 16-in. shallow dome reflectors. This lighting was designed for 20 foot-candles, and to give good distribution of light to all parts of the floor. It has proved satisfactory in night operation, as truckers can readily read all markings for destination, and checkers need no additional light for either receiving or weighing at the scales. The interior of the house is painted a light gray color, which was chosen for its pleasing appearance, as well as its light-reflecting qualities, avoiding artificial lighting during the day.

Side ramps, for easy access, are provided at each end of the new building, and at the south end of the island platform. Modern scales are located throughout the floor area to permit quick and accurate weighing. For ease in handling freight, and for the opening of such areas as may be required, seventy-six 18-ft. manually-operated steel rolling doors have been provided on both the street and track sides of the building.

Large office space was already available in a second-story portion of the existing inbound freighthouse; therefore, in the construction of the new facility it was necessary to provide only general offices for the agent, warehousemen, etc. These offices are located in a second-story portion of this house, situated at about



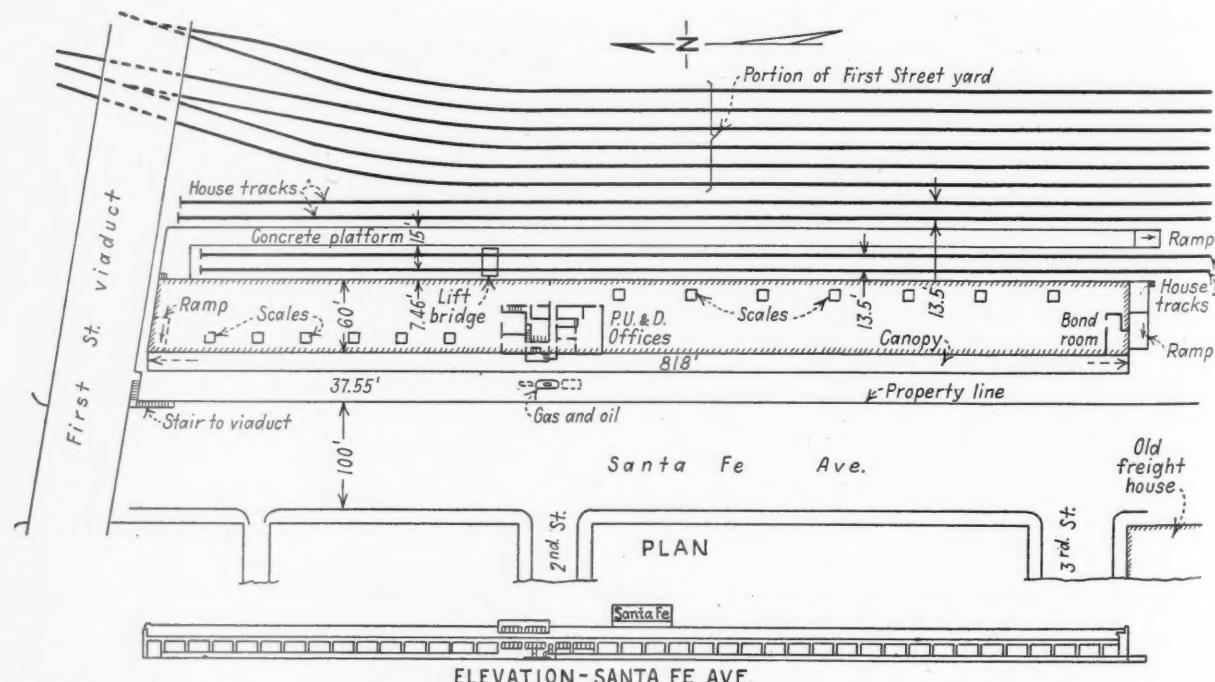
Track side of the freighthouse after it was placed in service, showing the island platform. Appurtenances seen in this view include the vertical lift bridge in center of platform, loud-speaker on top of lift bridge tower, and call-in box along right hand edge of platform in foreground

the center of the building. In addition to office space, this second-floor area includes a file room, toilet facilities for men and women, freight checkers' locker room, warehousemen's locker room, and lunch room. Offices have been provided on the first floor for the pick-up and delivery service, together with a 20-ft. by 30-ft. bond room.

#### Complete Communications

A loud-speaker system, with central control in the warehousemen's office, provides supervision and direct contact with operations over the entire facility. This is a combination loud-speaker, paging and inter-com-

munication system, making use of the talk-back type of speakers. There are sixteen call-back boxes, placed at every fourth door and on both sides of the house in a staggered arrangement. Four others are located on the island platform. Loud speakers are attached to the bottoms of alternate roof trusses through the center of the house, and on the framework of the vertical lift bridge to the island platform. The loudspeakers are of the 360-deg. type in order to spread the sound. By installing a large number of small speakers a better quality of tone and distribution of sound are obtained. A smaller number of large loudspeakers, to be audible in all parts of the house, would



Plan of the new freighthouse and adjacent area, and elevation of the structure as seen from Santa Fe avenue

produce loud blasts of sound that would be startling to employees and would disturb operations.

Direct contact is made with all operations. For instance, if a lift truck is needed, the floorman goes to the call-in box and says: "Little lift 14 on 3." The main office then relays this message over the loud-speaker and the equipment is dispatched quickly. This eliminates the time lost when it is necessary, as under the old system, to send a man out to find the lift truck.

A pneumatic tube system has been installed between the general freight offices in the existing outbound house and the new freighthouse. This system, extending under Santa Fe avenue, expedites the movement of paper between these two offices, which are about a thousand feet apart.

A large "Santa Fe" neon sign is placed high above the roof, and a vertical sign, with directional arrow to the offices, is visible to truckers approaching from either direction on Santa Fe avenue.

### Construction Features

The fill between retaining walls of both the main freighthouse platform and the island platform consists of 6-in. layers of sand and clay, trucked into place, and rolled and compacted with sheepfoot rollers, to obtain maximum compaction before the concrete floors were poured. The foundations, walls, and floors of the main house and the island platform are of 3,000-lb. concrete, delivered in transit-mix trucks.

Non-extruding fiber-type expansion joints were spaced at 120-ft. intervals in the main building. Each of these joints provides a break in the concrete from the top of the footing to the top of the parapet wall on each side of the house. These joints extended through the entire house, that is, through walls, floor and roof; double roof-supporting columns were provided at these joints. Similar expansion joints were placed at the same intervals in the island platform. They are of the fiber type, using Celotex board between 3-in., 5-lb. channels placed back to back, with the Celotex extending the full thickness of the 6-in. floor. The legs of the channels provide an armored edge or wearing surface for the joint, eliminating cracking or crumbling under heavy trucking.

Further provision for contraction was made in the concrete floor slabs by placing dummy joints at intervals of 40 ft. across the building and lengthwise through the center. Each of these was formed with a 3-in. piece of sheet metal set vertically in the slab. These joints did not interfere with the concrete finishing machines and they formed a definite plane. A smooth, durable floor for heavy-duty trucking was obtained by pouring the floor monolithically, with joints as described. Wire-mesh reinforcing used in the floors does not extend through the expansion joints, but does extend under the metal strips at the dummy joints.

All concrete floors were leveled off with a push float, followed by the operation of a mechanical Kelly float. At the proper time of curing, two parts, or 35 lb., of metallic hardener to one part, or 17½ lb., of cement, were added for each 100 sq. ft. of floor, and beaten into the surface with a Whitman float. All concrete floors were cured by application of a membrane curing compound.

The main roof structure consists of 37 Summerbell, ledger-type, built-up, wood-frame roof trusses, each

having a 59-ft. span and an 8-ft. rise. The heel of each truss is constructed so that the upper chord bears on a steel shoe which encases the entire head assembly. Two lines of longitudinal bracing, including both horizontal and diagonal members, extend between trusses. The roof is covered with wood sheathing and a built-up asbestos surface of two layers of 15-lb. perforated asbestos over a 45-lb. asbestos base. Expansion joints were provided in the roofing at the same 120-ft. intervals as the joints through the other parts of the house. A copper gutter extends the full length of the canopy. Small 4-ft. by 4 ft. 8 in. sky-lights, of corrugated wire glass, are placed in the center of the roof in alternate spaces between the trusses.

### Mechanical Equipment

Streamlined platform and house operation is brought about by the use of one 1,000-lb. and one 4,000-lb. fork-lift truck, and 20 gasoline-operated tractors, providing easier and faster handling of freight with less damage from shock, etc., due to the fact that this equipment is all rubber tired. The gasoline-operated tractors have proved to be very satisfactory for the movement of freight from the house to the cars and vice versa. The speed with which they operate makes it possible to move all freight on a current basis as it is unloaded, either from cars or from trucks, thus avoiding congestion. The fork-lift trucks handle all heavy shipments, are in constant demand, and are required to fill the mechanical needs for modernization of the plant. Back injuries have been eliminated and heavy shipments are handled with less breakage. The old style two-wheel hand trucks are also used.

Regular traffic lanes are marked out on the freight-house floor for the operation of the gasoline tractors, providing for normal right-hand operation for in-and-out movements across the trucking bridge. These tractors are limited to a load of three flats or trailers at a time; as a consequence the operation is much faster, and no time is lost in passing. In other words, the movement is more flexible and congestion is avoided. A normal crew consists of two operators, two truckers, one breakout, and one check clerk, or a total of six men.

The handling of outbound freight with tractors does not entirely eliminate the flat system; however, the tractors, by working back and forth quickly, give the necessary boost to create more rapid circulation and prevent sluggishness when traffic is heavy.

Average operation of the house is set up for opening at 6 a.m.; deliveries start at 7:30 a.m., and receiving of outbound shipments begins at 8 a.m. Both inbound and outbound movements, as well as transfer work, are carried on through the day until 4 p.m., after which time all forces and equipment are used on outbound shipments. This continues until closing time. The south end of the house is normally devoted to inbound deliveries and the north end to receipt of outbound shipments.

This new facility was designed by H. L. Gilman, architect of the Santa Fe's Coast Lines, and construction at the site, which was done by the Utah Construction Company, was under the supervision of J. M. Walters, assistant engineer. All work was under the direct supervision of M. C. Blanchard, chief engineer of the Coast Lines, Los Angeles, Cal.

# BOWMAN ANSWERS INQUIRING STOCKHOLDER

**C. & O. president explains road's independent actions in public relations and advertising have been based on conviction that threat of socialization calls for "vigorous and affirmative measures"**

Independent actions of the Chesapeake & Ohio in the fields of public relations and institutional advertising have been based on its conviction that, "unless vigorous and affirmative measures are taken," the railroads are in "grave danger" of drifting into socialization, C. & O. President Robert J. Bowman said last week. The statement was included in a February 26 reply to George S. Jackson of 230 West End avenue, New York City, a C. & O. stockholder who recently asked Mr. Bowman several questions regarding the policies and activities of that road.

"The directors and officers of the C. & O.," Mr. Bowman told Mr. Jackson, "have long been convinced that the railroads of the United States are exceedingly vulnerable to socialization and that any serious breakdown either in railroad services or in railroad finances might well precipitate government ownership or operation, or both. . . . This danger exists not because anyone (except a handful of radicals) wants the railroads to fall into the hands of the government. Rather, it is because railroad policies have not been sufficiently affirmative to meet the needs of the times."

## **Sees Lack of "Economic Statesmanship"**

"Railroad men, for the most part, are courageous, able and faithful. There are many progressive elements within the railroad industry which have made important progress in particular situations. But the industry as a whole has not, in our judgment, shown the kind of 'economic statesmanship' which will accomplish the primary objective—to develop an industry so strong that it may stand upon its own feet, in times of adversity as well as in times of prosperity, as a going, solvent, vigorous part of a private enterprise system."

"Accordingly, we on the C. & O., believing that for the present and the immediate future we would not be able to persuade a majority of the industry, as represented in the councils of the Association of American Railroads, of the necessity of taking the sort of vigorous action which we advocate, have concluded that the ultimate objective is more likely to be attained if, for the present, we should pursue our own program."

Mr. Jackson's questions were embodied in a January 17 letter to the C. & O. president, as reported in the *Railway Age* of January 31, page 50. The inquiring stockholder sent a copy of his letter to the Interstate Commerce Commission, and the commission also got a copy of the February 26 reply from Mr. Bowman. The letters have become part of the commission's correspondence file in Finance Docket No. 14692, the proceeding which involves the pending petition of the C. & O. and Alleghany Corporation for release of the former's 400,000 shares of New York Central stock from the requirement whereby it has been deposited

with the Chase National Bank as independent voting trustee under the trusteeship created pursuant to the commission's June, 1945, decision approving Alleghany's control of C. & O.

As reported elsewhere in this issue, the commission last week heard oral argument (with Stockholder Jackson participating) on this petition and the related applications of Mr. Bowman and C. & O. Chairman Robert R. Young for authority to serve on the N.Y.C. board of directors while continuing to hold C. & O. directorships and their present positions with that road. Assistant Director C. E. Boles of the commission's Bureau of Finance has recommended in a proposed report that the petition and applications be denied (see *Railway Age* of December 13, 1947, page 64).

Mr. Bowman's reply to Mr. Jackson opened with an expression of the C. & O. president's "hearty agreement" with the inquiring stockholder's statement that "it is a stockholder's right to request and receive information about the company in which he has an interest." Thus did Mr. Bowman, as he put it, "accept cheerfully my obligation to make the fullest disclosure of the facts."

Proceeding then to answer Mr. Jackson's 10 specific questions regarding C. & O. orders for new passenger cars and the age of its present equipment, Mr. Bowman set out the figures in two tables. They showed that the C. & O. now has on order 332 passenger-train cars, including 140 coaches and combination coach-lounge and coach-baggage cars, 11 parlor cars, 97 sleeping cars, 54 dining cars, and 30 other passenger-train cars. The orders were placed on the following dates: August 8, 1945, 30 cars; January 10, 1946, 16 cars; November 19, 1946, 264 cars; March 8, 1947, 22 cars. Mr. Bowman said that the cars ordered August 8, 1945, and January 10, 1946, are scheduled for delivery in the period May-July, 1948, while those ordered November 19, 1946, and March 8, 1947, "are expected to be delivered in 1949."

## **C. & O. Passenger-Car Situation**

With respect to the age of present C. & O. passenger equipment, the figures presented by Mr. Bowman were as of December 31, 1947, and they excluded "combination coach-baggage, etc." They showed a total ownership of 237 cars, of which 8 were in the five-years-or-less age group. Twenty were over five but less than 10 years old; 13 were 10 to 15 years old; 52 were 15 to 20 years old; and 144 were over 20 years old.

The remainder of Mr. Jackson's letter, as Mr. Bowman read it, referred "partly by way of specific questions but more by way of comment, to several aspects of C. & O. policy." The C. & O. president went on to point out that Mr. Jackson had mentioned the C. &

O.'s advertising program, the recently established central reservation bureau at Huntington, W. Va., the C. & O.'s passenger business and its relation to the results of operation of the railroad as a whole, the reacquisition from the government and reopening of the Greenbrier Hotel at White Sulphur Springs, W. Va., and the relation of the C. & O. and its officers to the Federation for Railway Progress.

### C. & O. in General Railroad Situation

It was before getting into his specific replies to Mr. Jackson on those subjects that Mr. Bowman made his statement with respect to the threat of socialization and other like comment. "These matters," he explained, "are so closely related to the general railroad situation and the overall policies of the C. & O. that they cannot be adequately treated without some reference to the context of which they are a part."

The "heart" of the C. & O. program, its president went on, is to install on that road "modern business management. . . in keeping with the highest standards which have yet been developed in the American enterprise system." To that end it has been engaged in the provision of "adequate facilities for an expanding coal, merchandise freight and passenger business."

Dealing first with the coal situation, Mr. Bowman said that the volume of bituminous originated had grown from 34 million tons in 1923 to a current annual rate of 75 million tons. Since January, 1942, the road has "constructed, authorized or proposed" a total of 39 new extensions into coal areas. Authorizations during 1947 for construction projects totaled \$34,254,372, including such "typical items" as the "new coal dock and other terminal improvements at Newport News, now under construction, at an estimated cost of \$5,878,800"; and "improvements in Walbridge Yard and Toledo dock facilities at an estimated cost of \$3,500,000." The current freight equipment program contemplates the addition of 7,700 new freight cars during 1948, Mr. Bowman also reported.

While the C. & O. originates more bituminous coal than any other railroad in the country, Mr. Bowman pointed out that it also handles a substantial amount of other freight traffic which accounted for 37.8 per cent of its 1947 gross revenues. In its undertaking to adopt sales and service methods in keeping with its expanding business, the C. & O. management, as Mr. Bowman put it, believes it has gone as far as any railroad in giving its sales and traffic staff "a substantial voice in the conduct of our business, to the end that the needs of our patrons may be promptly and fully met."

### Research and Personnel Programs

With respect to the "application of modern technology to railroading," the C. & O. management believes that the railroad industry as a whole "has failed to benefit adequately from the enormous advances which have been made in recent years in science and engineering because railroads, on the whole, have not been willing (except in a few instances) to follow a 'revolutionary' approach." Mr. Bowman explained that he meant "the method, first of looking at the job that needs to be done and then, second, reviewing the whole of modern technology and practices in an effort to find the best possible tools for that job, regardless of what tools may happen to be in use at the present time."

To set itself up for this "revolutionary" approach, the C. & O., its president continued, has employed as a member of his staff a research consultant, K. A. Browne, "who came to us with an outstanding record of accomplishment in the aeronautical industry." Under the direction of C. R. Hook, Jr., vice-president—personnel, it is pursuing a "modern personnel and employee relations program." This latter policy is based on a belief that the loyalty and skill of the "typical railway employee" are "priceless assets."

On the matter of "modern financial and budgetary control methods," Mr. Bowman told Mr. Jackson that the C. & O. comptroller, "with the aid of consultants with experience in this field," is working out a system of budgetary control based on methods employed in other industries. The C. & O. management is confident that the system "will enable us to effect substantial economies, through better knowledge of our business and control over our expenditures, than can be achieved by the more typical railroad methods heretofore pursued." Meanwhile, Mr. Bowman had suggested to the inquiring stockholder that "the improvements which have been accomplished in recent years in the financial and debt structure of the C. & O., and more especially in the now merged Pere Marquette, are matters of record upon which extensive comment here is not necessary."

### Investment in New York Central

This brought the C. & O. president to his comment on that "further important aspect of C. & O. policy which is designed to aid in the accomplishment of our objectives," i.e., the acquisition of 400,000 shares of N.Y.C. stock. While Mr. Jackson was advised that he and other stockholders would soon receive a circular with reference to the transaction, Mr. Bowman nevertheless summarized briefly the position of the C. & O. management.

"The C. & O., the greatest coal originating railroad in the world," he said, "delivers only a small proportion of its vast originated tonnage to customers on its own lines. . . More of the markets for C. & O. coal are on the New York Central than on any other line. The Central needs millions of tons of coal to serve the great industrial communities in its territory. But it has on its own line not nearly enough coal production to take care of its markets. In short, the C. & O. has the coal and needs markets; the Central has the markets and needs coal."

"When it comes to freight other than coal, however, the situation is precisely reversed. In 1946, for example, the Central originated 48 million tons of traffic besides coal—two and one-half times as much as the C. & O. (including the merged Pere Marquette). The C. & O. seeks constantly to develop its freight business—to diversify its traffic. The Central is the best source for such diversification."

In a "word about C. & O. policies which affect the railroad industry as a whole," Mr. Bowman told Mr. Jackson that however successful the C. & O. may be in bringing its own practices "into conformity with the best standards of modern business," it shall have done "only part of the job." This is because the C. & O. is "inseparably related with every other railroad in the country." It believes, therefore, that its own interests, as well as the interests of the industry, require that it "pursue a course of action designed

first to make the travelers, shippers and voters of the nation aware of the need, from the standpoint of their own interests, of improvement of the railway situation, and second, to marshall public support for measures calculated to bring about sound public policies toward transportation."

### The Advertising Program

That is the purpose of the C. & O.'s institutional advertising and its participation in the Federation for Railway Progress, Mr. Bowman explained. He gave Mr. Jackson figures showing that the total 1947 outlay for advertising was \$1,677,180.41, including \$580,237.14 for institutional advertising. The latter included \$122,428.16 for C. & O.'s participation in sponsorship of the "Information Please" radio program, and amounts ranging from \$40,140.11 to \$124,098.93 for six institutional advertisements published in newspapers and periodicals.

Meanwhile, the C. & O. spent last year \$842,511.03 on "sales and service advertising and promotion." Mr. Bowman suggested that "probably very little, if any," of this type of advertising was seen by Mr. Jackson, since most of it "was directed to specific groups of shippers or travelers."

Other items in the 1947 advertising program were \$89,105.03 for administrative expense, \$55,146.57 for financial advertising, and \$110,180.64 of "miscellaneous promotional expense," including a net loss of \$44,296.83 on boys' club tours. "We believe that our boys club and educational tours are the kind of long-range promotion and public relations activity which is essential to a sound railroad program," Mr. Bowman explained. He also said that the "Chessie" calendars and playing cards "have been making friends for us for many years."

### Relatively Little Spent for Advertising

Suggesting that if any criticism be deserved, such complaint might well be that the C. & O. has not done enough advertising, Mr. Bowman calculated that the 1947 outlay amounted to only 0.54 per cent of C. & O. gross revenues. This is "considerably less than the proportion of revenues spent by most other industries for advertising," the C. & O. president next pointed out. He added that "in recent years the domestic air lines have been spending 3 per cent of their gross revenues in advertising and publicity."

Coming to Mr. Jackson's inquiry regarding the central reservation bureau at Huntington, Mr. Bowman called that facility a "carefully engineered solution to cure the defects of the present system of handling passenger reservations." He added that, since the bureau was installed, "two large eastern railways have placed orders for the same type of equipment for experimental installations." As to the cost of the Huntington installation, Mr. Bowman conceded that C. & O., as "the pioneer in a new field," bore some development expense, but it "should enjoy the credit, respect and good will of those affected by the development." He explained that "this good will manifests itself in added revenue ton-miles which will not appear in the passenger traffic portion of the income account, but represents an additional benefit coming from these progressive developments."

The installation cost of the entire project, charge-

able to capital account, was \$76,500, which includes \$61,300 for furniture, furnishings and equipment, Mr. Bowman said. He put the estimated annual operating costs at \$421,265, including \$300,000 for leased telephone wires (4,681 air-line miles at present) and \$121,265 for salaries of personnel. On the basis of the 1947 business, this annual operating cost of the bureau would be 3½ per cent of C. & O. passenger revenues, Mr. Bowman calculated. At the same time, he noted that "sizeable offsetting savings" are expected to result from the reduction of present telegraph and long-distance telephone charges; freeing of company-maintained telegraph and telephone lines; and release of higher-salaried personnel from reservation work.

Stockholder Jackson had also asked specifically who approved installation of the bureau. Mr. Bowman replied that the installation was undertaken at his direction; and that he acted under C. & O. by-laws which authorize the president to approve operating expenditures and under authority he has from the board of directors "to anticipate its approval pending completion of plans of minor capital outlays."

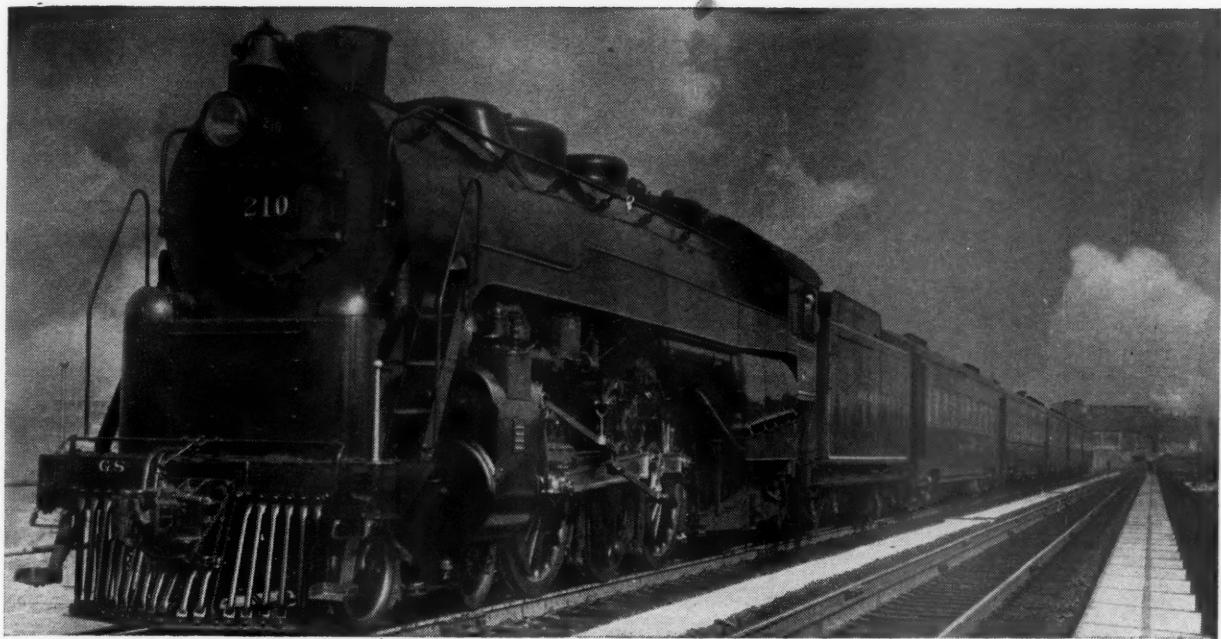
### Passenger Deficit "Good Business"

As to the inquiring stockholder's questions regarding the financial results of passenger operations, Mr. Bowman set out the C. & O. management's passenger-service policy as one based on the belief that "it is good business to sustain a deficit, even of several million dollars annually, in providing a service which gives essential support to our freight business of nearly \$300 millions annually." Comparative data on financial results of passenger operations on the C. & O. and N.Y.C., as used by Mr. Jackson, might be cited "superficially" as justification for either abandonment of passenger operations by the C. & O. or the reduction of service to a "very minimum," Mr. Bowman conceded. However, he hastened to express the C. & O. management's belief that such a policy "would be shortsighted and in the end would reduce C. & O.'s overall net railway operating income and net income."

"The first job of the C. & O.," its president continued, "is the development of the great coal resources of the areas it serves. If these resources are to be developed, mining companies must be induced to locate and set themselves up in business. Our mine operators cannot hide themselves away in seclusion in the hills of West Virginia and Kentucky; they must travel in and out, and people who do business with them must continually travel between these mining operations and other areas of the country. If the C. & O. were to offer no passenger service, it would be seriously handicapped in the vital matter of locating and maintaining coal mines on its lines. If it were to offer inferior passenger service—in fact, anything but the very best—its freight patrons would wonder why the railroad to which they pay millions in freight revenues could not provide them with the kind of service to which they are entitled."

"Likewise, when it comes to freight other than coal, the C. & O. has been engaged in a continuous—and, if I may be permitted to say so, successful—campaign to attract industries to its lines and to induce manufacturers and others to avail themselves of the many advantages to be found in C. & O. territory. Many of

(Continued on page 51)



First of a new series of locomotives from the Reading shops pulls the new train



Luggage racks in the dining car are an innovation

## READING ADDS NEW “WALL STREET” TO PASSENGER-TRAIN FLEET

On March 1 the Reading's new "Wall Street" began operation in daily round-trip service between Philadelphia, Pa., and Jersey City, N. J., in conjunction with the Central of New Jersey. The five-car train includes three coaches, a dining car with cocktail lounge, and a club car.

All of the equipment in the train was turned out by the Reading's shops at Reading, Pa. Appointments are luxurious and complete, including advanced air-conditioning apparatus and Sleepy Hollow seats.



In the colorful club car



The coaches have Sleepy Hollow seats

# WHAT'S AHEAD IN FACILITIES AND SERVICE

**Subcommittee of Railroad Committee for Study of Transportation outlines prospective future developments in railroading**

Prospective future developments, which are expected to make various phases of railroad operation more efficient and result in improved services, are outlined in a report issued recently by the Subcommittee on Operating Methods and Procedures of the Railroad Committee for the Study of Transportation. The subcommittee, headed by J. M. Symes, vice-president of the Pennsylvania, was part of the group which carried out a five-year research program under the general chairmanship of R. V. Fletcher, special counsel of the Association of American Railroads and formerly, in turn, the association's vice-president—research and president. This general committee's final report was reviewed in the *Railway Age* of September 13, 1947, page 67.

The subcommittee report now issued is a document of 44 double-column pages, entitled "Railroad Operating Methods and Procedures." As Judge Fletcher's foreword puts it, the report "focuses attention on those branches of the railroad organization which have to do with maintenance of the fixed facilities and rolling stock and the actual operation of the service." The introductory chapter, which describes and charts the general organization of a railroad, is followed by others describing the engineering and mechanical departments and the facilities and equipment under their respective jurisdictions. Then comes a chapter on the transportation department which tells how the railroads performed their wartime job with the cooperation of shippers and government agencies.

## Rail and Roadbed

The discussion of "future developments" predicts first that rail will be longer and heavier, with more use of continuous-welded rail, and with improved metallurgy to provide better resistance to the shock of traffic, "all of which should make for smoother riding and longer life." Reference is also made to "current studies of the actual stresses in rail under load" which "probably will lead to some change in the design or shape of the rail and tieplates." Meanwhile, new knowledge about the engineering properties of soil "may point the way toward better and stronger roadbeds, lower maintenance costs, and easier riding." Maintenance costs are also expected to be reduced as a result of installations of the "many new types of work equipment."

As to centralized traffic control systems, the subcommittee anticipates that they will be improved and applied to "many single-track lines with heavy traffic." It also expects that train movements will be speeded up by "greatly improved continuous cab signals, together with automatic block signals and coded track circuits." Radio and inductive train communication are said to be "already firmly established on railroads,"

and such facilities "will be greatly expanded as technical difficulties are overcome, with resulting increases both in safety and efficiency of train operation."

In discussing its general finding that "gradual but far-reaching changes in cars and locomotives may be expected," the subcommittee predicts that the steam locomotive "will maintain its place as the backbone of railroad motive power for some years to come." This prediction is found warranted because "potential improvements" in the steam locomotive "through the use of turbines, high-pressure boilers, and other similar advances are so great."

"All types of locomotives will be improved," the report also says. "Substantially lessened initial cost of alternate types of power can be expected in the future, with improvements in materials and designs to bring about greatly reduced maintenance outlays."

The subcommittee does not expect the appearance of freight cars to change substantially, but it predicts that the freight car of the future will be "quite different in construction, with sides and roof made of special alloy steels, aluminum, or other lightweight materials, and with trucks, wheels, and axles designed for higher speed." Other improvements in the freight car are expected to include "automatically adjustable" brakes; roller bearings if "improved and inexpensive" designs can be developed; improved couplers, draft gears and springs; better methods of lubrication; and special alarm devices to detect hotboxes.

Mention is made of the fact that box cars "are already being equipped with special devices for loading certain types of industrial products speedily, cheaply, and more nearly to capacity," while tank cars are being made "leak-proof and much safer." Another development which the subcommittee foresees is a "more extensive use of flat cars to transport loaded trailers, of lightweight construction, with simplified equipment at destination to set the trailer on a truck chassis for local delivery of the contents." As to refrigerator cars, the report says they will be lighter in weight; and it suggests that improved reefer service would be possible if there can be developed "small, efficient, and trouble-free mechanical refrigerating units."

## Passenger Cars

With respect to passenger cars, it is predicted that this class of rolling stock will undergo many changes. "Cars," the report continues, "will be built of materials such as stainless and other high-strength steels and aluminum, with radiant heating from floor and window panes when cheap, efficient, and reliable radiant-heating systems are developed. With improved electrical systems will come better lighting and clearer radio reception. Many new designs of luxurious sleeping-car accommodations are on the way, to replace the

older types of open-section cars. If experience proves them satisfactory, there will be an increasing number of 'Vista-Dome' types of cars, permitting passengers to sit high-up in a glassed enclosure where they can see in all directions. New designs are being applied in kitchen and dining facilities to provide better and quicker meal service."

Of shop methods and facilities, it is reported that mechanical departments on "most railroads" are on the alert to adopt improved shop methods and facilities," and that shop layouts "are being redesigned to promote straight-line movements of parts and equipment with minimum waste of time and motion." Freight cars, the report adds, "are rebuilt on an assembly-line basis, to cut costs and time."

This brought the subcommittee to its predictions with respect to the transportation department, and in that connection the report says that the expected improvements in facilities will bring increased train speeds in both freight and passenger service. Smoother-riding equipment is also expected to bring economies to shippers in that they will be able to use cheaper materials for packaging. Loading and transfer stations for l.c.l. are expected to be "further mechanized," and l.c.l. service made more frequent "by taking advantage of otherwise-empty car movements." Also, more passenger trains "may handle one or two freight cars at the head end to give extra-expedited service." Reference is also made to prospects for the development of container service and proposals to make the periods during which freight stations are open better suited to shipper needs.

Improvements in the handling of carload freight are expected to take the form or "many more" scheduled freight trans, more installations of car-retarder yards, and communications systems which will give yard forces advance information as to the consist of inbound trains.

"Regardless of steps to expedite the road-haul portion of the strip," the report says, "yard and terminal operation must be greatly speeded up if overall performance is to be significantly improved."

Prospective improvements in passenger service, according to the report, contemplate reductions in the remainder of stops of high-speed trains, greater frequency of service, and mechanical equipment to handle baggage. Also, terminals "are being modernized," while "ticket machines and other devices to speed up ticket sales are well advanced in development."

The report's final chapter discusses "coordination," noting the extent to which railroad facilities and services have already been coordinated to make "a nationally unified system of transportation." The desirability of further coordination among transport agencies of different types is conceded; but that type of coordination is found to be "handicapped by the unequal competitive position of the railroads." Another adverse factor is found in the division of regulatory authority among different federal agencies. "If maximum progress is to be made in coordination of various forms of transportation in this country, and a healthy, well-balanced transportation system is to be developed, all forms of interstate for-hire transportation should be under one regulatory body," the report says.

## BOWMAN ANSWERS STOCKHOLDER

(Continued from page 48)

the areas which are most attractive from an industrial standpoint are not readily accessible, such as the coal mining areas. With a standard of passenger service in which it can take pride, the C. & O. can offer the most to the industrialist who is considering a new plant location. Without first-rate passenger service, it would be seriously handicapped."

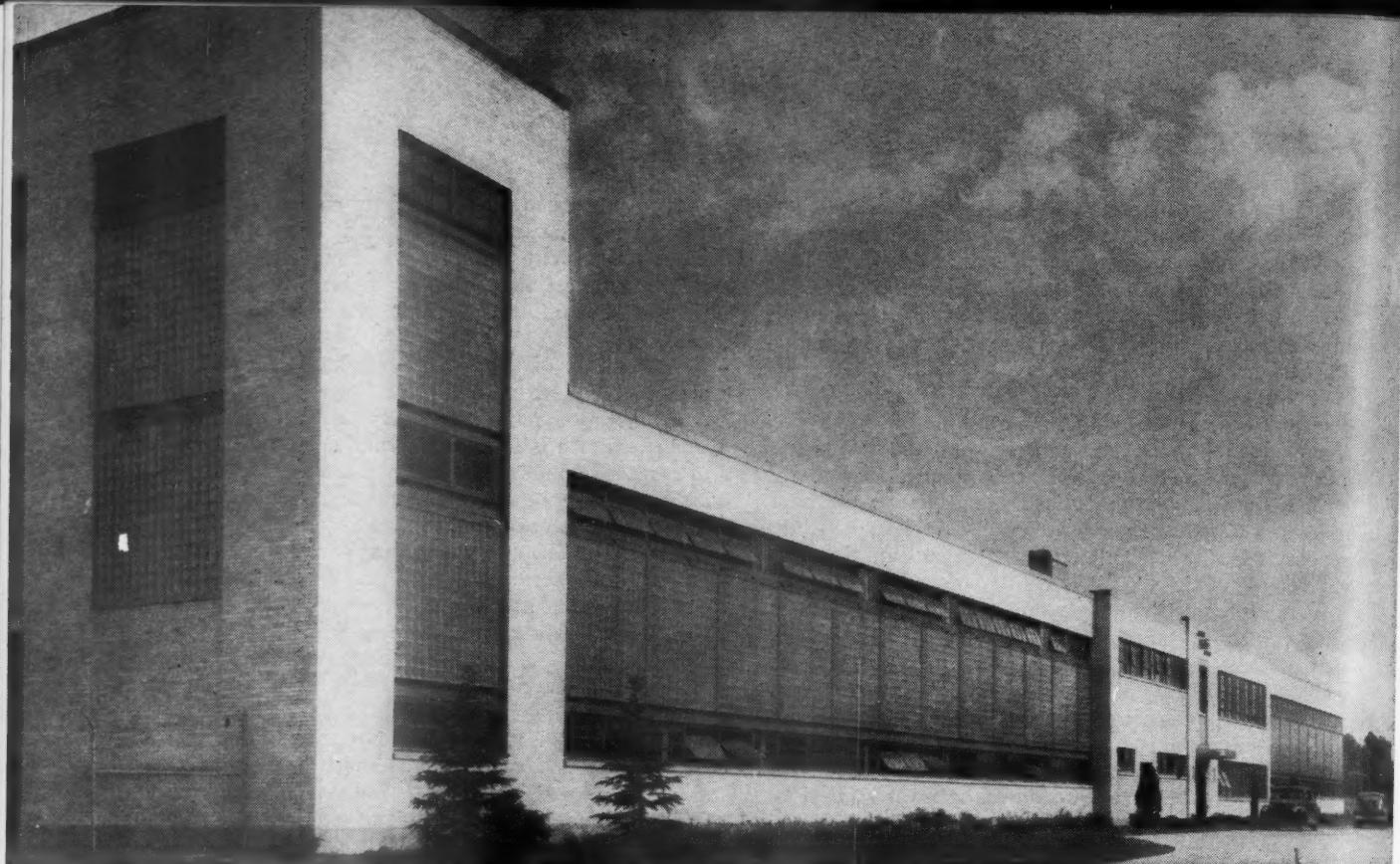
Mr. Bowman answered in considerable detail Mr. Jackson's questions regarding the reacquisition of the Greenbrier Hotel at White Sulphur Springs, pointing out that the hotel earned a profit for the prewar period of C. & O. operation as a whole; and that it also brought substantial amounts of freight and passenger business to the railroad.

The inquiring stockholder had also asked about the total salaries received by William C. MacMillen, Jr., and L. Goddard, president and secretary, respectively, of F.R.P., and the proportion of such salaries paid by the C. & O. Mr. Bowman replied that Mr. MacMillen's salary is \$15,000 a year, the apportionment on a monthly basis being: C. & O., \$541.66; Alleghany, \$250; Pathe Industries, \$41.67; F.R.P., \$416.67. Mr. Goddard's salary was reported by Mr. Bowman as \$10,000 a year, the apportionment on a monthly basis being: C. & O., \$361.11; Alleghany, \$166.67; Pathe

Industries, \$27.78; F.R.P., \$277.77. "The Chesapeake & Ohio and the other participants received services from Messrs. MacMillen and Goddard commensurate with amounts apportioned to them," Mr. Bowman assured Mr. Jackson.

He also advised that he was elected to the F.R.P. executive council on August 4, 1947, and thus was not a member, nor an officer of the federation, when he wrote a previous letter to the inquiring stockholder on May 23, 1947. This was in reference to Mr. Jackson's complaint that the May letter had not told him what he wanted to know about the salaries paid by F.R.P. to Messrs. MacMillen and Goddard; and his suggestion that a member of the federation's executive council should not be unaware of salaries paid its officers.

Mr. Jackson stated that he and his wife own 550 shares of C. & O. common stock, and his letter to Mr. Bowman called this "five times as much direct ownership interest" as that of C. & O. Chairman Young. With reference to such comment on Mr. Young's holdings, Mr. Bowman said: "The C. & O. 1947 proxy statement shows that Mr. Young owns beneficially 110 shares of C. & O. common. Mr. Young is chairman of the board of Alleghany Corporation. Alleghany is the holder of 516,234 shares of C. & O. common stock and Mr. Young represents that holding on the C. & O. board. We believe that any true picture of the situation must take the Alleghany holdings into consideration."

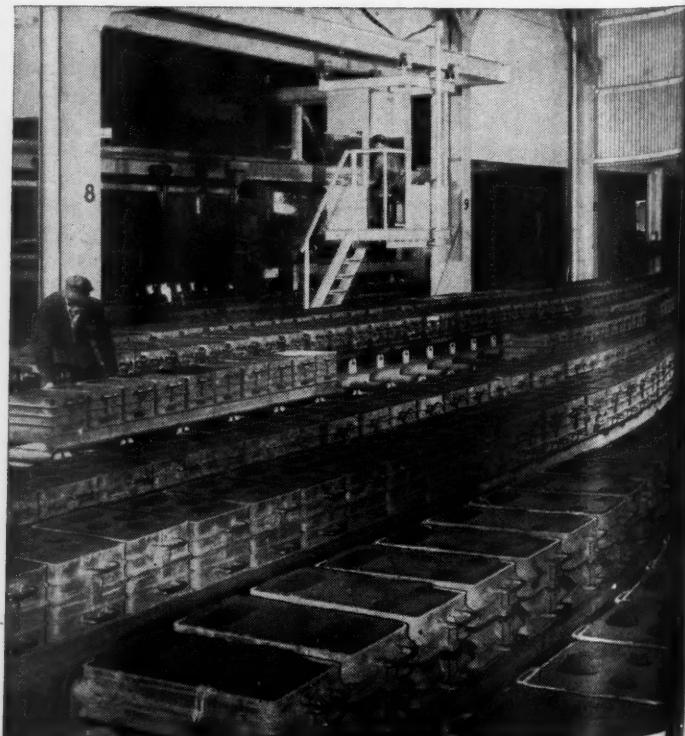


## LAST WORD IN BRAKE SHOE PRODUCTION

American Brake Shoe has long believed that the quality of its products is determined not only by complete, efficient production facilities backed by progressive research and engineering, but also by employing skilled, high-type workers in its plants. Realizing

that to rate the best people, it must provide them with the finest possible conditions under which to work, it embarked on a \$15,000,000 plant improvement and expansion program at the close of the war which has involved building six new plants, construction of a new chemical research laboratory at the company's research center in Mahwah, N. J., the closing of five old high-cost plants, and numerous additions to existing plants throughout the country.

Typical of the new plants is the Brake Shoe & Castings Division's foundry at Meadow Lands, Pa., (25 miles from Pittsburgh) which was placed in opera-



tion several months ago. It is constructed of buff brick, concrete, and glass blocks which insure plenty of natural light. Rectangular in shape and consisting of 80,000 sq. ft. of floor space, it houses a foundry for the production of brake shoes and a press room for making brake shoe parts.

The plant is mechanized, having a multi-pouring device which has replaced the old hand-pouring method, conveyors, mechanical sand handling and shakeout equipment, power molding machines and tumblers. Two cupolas for melting the iron are charged mechanically. Scrap is loaded onto a scale outside the building in the rear by means of an electro-magnet crane. When a charge has been carefully weighed, a button is pressed, the load moves automatically up a ramp and is dumped into the top of the cupola. Hot metal is transported from the two cupolas to the two sets of pouring buckets by means of a lift truck with a ladle attachment on front.

The most modern sand-handling and dust removal systems are so designed as to occupy a minimum of floor space. An automatic conveyor system carries sand from the conditioning machine overhead to molding station hoppers.

Flasks leave the molder's stations on roller conveyors, move down to the pouring section, and following pouring, are lifted and stacked on a conveyor which leads to the automatic shakeout. Dust is carried down and under the floor of the shakeout and the newly cast brake shoes move up a conveyor to the tumbling machines, where they are loaded into the tumblers by hand. When removed, they are chipped, cleaned, and stacked on pallets for shipping. A spur line of the Pennsylvania runs into the foundry.

Every effort has been made to insure employees comfortable, healthful working conditions. Wash and locker rooms and the lunch room and kitchen are all of the most recent design and fully equipped with modern conveniences. All lockers are ventilated by forced circulation of air.

The Meadow Lands plant has replaced two older plant in Pittsburgh, both of which have been closed.

#### FACING PAGE—READ COUNTERCLOCKWISE

The new plant of the Brake Shoe and Castings Division of the American Brake Shoe Company at Meadow Lands, Pa., replaces two older ones

Locomotive driver shoes are machine molded

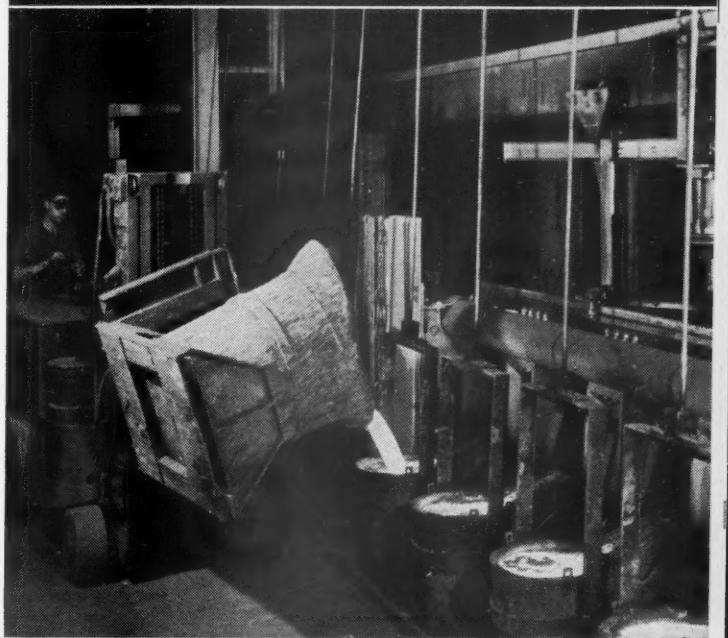
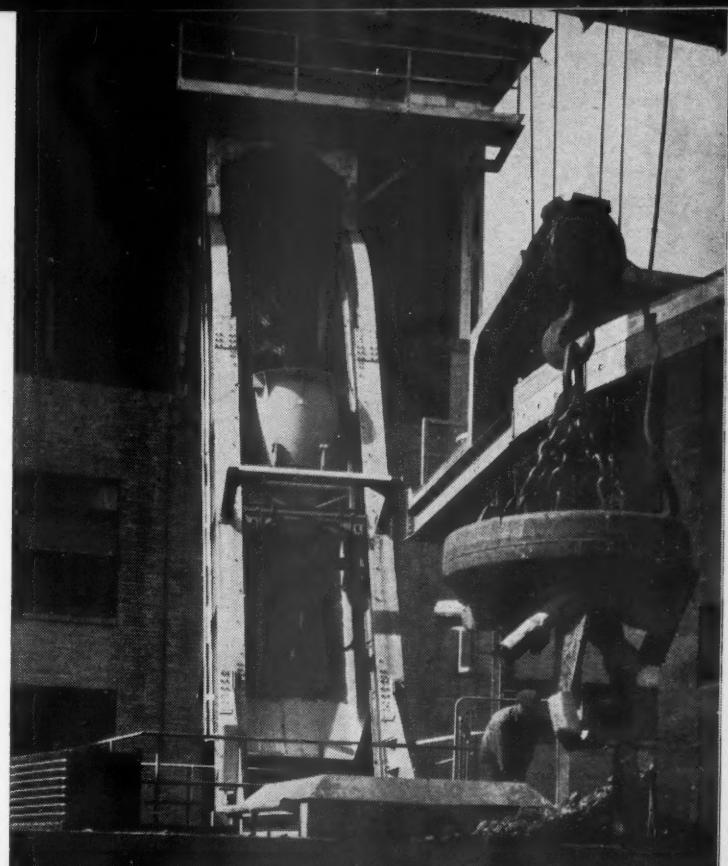
Pallets of brake shoe moulds awaiting transfer to the pouring device

#### THIS PAGE—READ TOP TO BOTTOM

Loading a weigh hopper by using a bridge crane magnet. When the charge has been loaded into the hopper (seen at the bottom) it will be dumped in the charge bucket, which is shown already on its way up the skip hoist to the cupola

An electric bull ladle transfers the hot metal from the cupola to the ladles of the multi-pouring device

Brake shoe parts are cleaned and dipped in the dipping room



# DETERMINING THE ORIGIN OF SURFACE DEFECTS IN ROLLED-STEEL PRODUCTS

A study of the various types of defects that appear in finished products some of which are defects existing in ingots and others due to rolling operations

By V. E. ELLIOTT AND C. L. MEYETTE\*

**S**URFACE defects may be classed as either of mechanical origin, such as those which occur in the heating and rolling operations, and include breaks, tears, guide marks, mechanical laps and the like, or they may have been in the ingot before heating and rolling. Examples of the latter are ingot cracks, blow-holes, scabs, and inclusions which lead to the numerous known types of seams and surface flaws. Most of the common types of surface defects and methods for their identification by visual examination or by the aid of macro-etch tests are well known. The conditions which caused their formation are also appreciably understood and this knowledge has been instrumental in the establishment of methods for metallurgical control.

In this discussion the term "mechanical type defects" will be used to designate those that have occurred as a result of the rolling operations such as in rolling

from the ingot to billets, blooms, or slabs or in re-rolling to finished products. The term "steel defects" will be used to designate those that were present in the ingot prior to primary rolling or that were in the semi-finished product prior to secondary rolling to finished product.

The basis for distinguishing between the two types of defects lies in the relative degree of subscale formation surrounding them. Subscale is defined as a zone of oxide particles precipitated and dispersed within a metallic matrix which has occurred by diffusion of oxygen inward from the metallic surface. In the routine examination by means of the microscope of a large number of cases, it has been observed that the diffusion of oxygen from the scale formed within the defect during heating and rolling varies in degree, depending upon the time of contact between scale and metal. Where the defects were present prior to a heating operation, as in the case of steel type defects, the time of contact will be long, depending upon the time required to bring the steel to rolling temperature, and the opportunity for oxide diffusion will be correspondingly

\* This article is a condensation of a paper presented before the American Institute of Mining and Metallurgical Engineers, New York, on February 19. Mr. Elliott is metallurgist, and Mr. Meyette, supervisor of research, Gary Steel Works, Carnegie-Illinois Steel Corporation.

Fig. 1

70 X

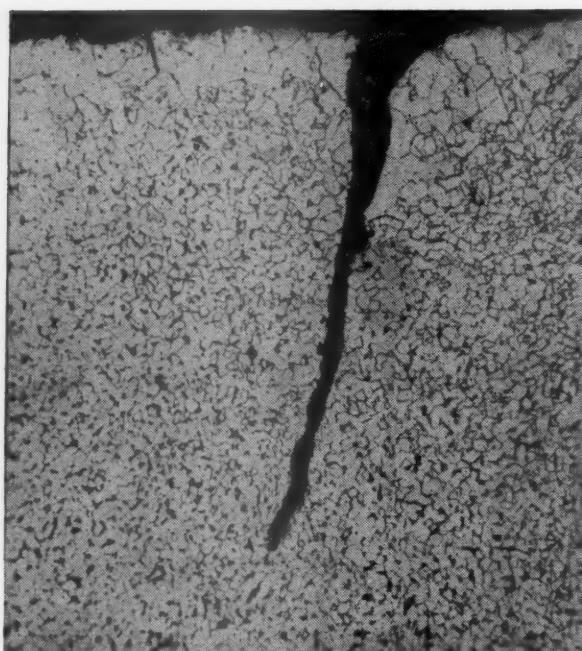
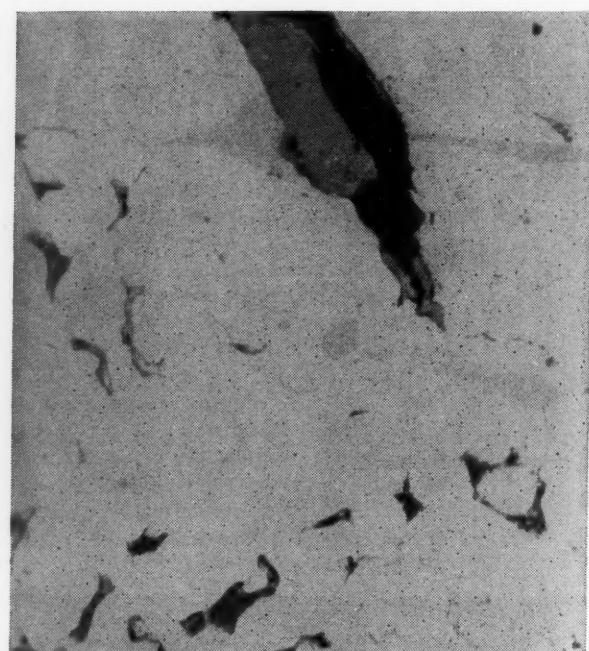


Fig. 2

400 X



great. Where the defects were formed during the rolling operation, as in the case of mechanical type defects, the time of contact between the metal and scale formed within the defect will be short, depending only upon the time needed to roll and cool the steel. Since the average temperature is lower during rolling than during heating, the opportunity for oxide diffusion will be correspondingly small.

The study was conducted along three lines: (1) to demonstrate the diffusion of oxide from scale-packed holes, (2) to observe the extent of oxide diffusion adjacent to artificially prepared defects, and (3) to apply the method of examination to actual cases.

#### Diffusion of Oxide from Scale-Packed Holes

Samples from ten commercial grades of steel were obtained for this study. Eight of the grades were basic open hearth steels chosen to represent rather wide variations in carbon, sulphur, silicon, nickel, chromium and molybdenum. The other two were electric furnace, stainless steels. Samples of each grade were obtained in hot rolled billet form.

Using billet samples  $\frac{1}{2}$  in. in length, a  $\frac{1}{8}$  in.-diameter hole was drilled in each sample perpendicular to the billet surface. The hole was drilled to a depth of one inch and packed with scale which had been obtained by heating representative samples of the respective grades at 2,150 deg. F., removing the scale and grinding it to pass an 80-mesh sieve. The holes were then plugged with a steel rod and welded to exclude air during the subsequent heating operation. All prepared samples were then heated in an electrically operated and controlled furnace for one hour at 2,150 deg. F. and air cooled, after which a cross section was cut through the scale packed portion of each hole. The section was mounted in bakelite, and polished by usual methods for microscopic examination. No etchants

were used since oxide penetration was clearly revealed after the polishing operation.

Considerable diffusion occurred in all of the grades, with the exception of the 18-8 grade of stainless steel, in which there was only a small amount of oxide penetration. With this exception, the oxide appeared as a band of fine precipitate parallel to the edge of the exposed surface. The penetration was more random and extended to a greater depth in the plain carbon and AISI A-4068 grades than in the other alloy grades where the penetration was more compact and showed evidence of outlining the grain boundaries. Variations in depth or character of the penetration are, however, of less concern than evidence of penetration or lack of it in the various grades of steel selected. Evidence of oxide penetration from scale to surrounding metal is either lacking or is present in the metal adjacent to defects, depending upon whether they originated during or prior to the rolling process.

#### Diffusion of Scale from Synthetic Flaws

To produce mechanical type defects, billet samples three inches in length from each of the grades of steel were used. The samples were heated at either 2,000 or 2,150 deg. F. for periods of one or three hours, after which they were removed from the furnace and at once notched  $\frac{1}{8}$  in. deep on one surface along the center line in the direction of rolling, using a V-shaped cutter and a sledge hammer. The billets were reduced 50 to 80 per cent in section on a 6-in. laboratory rolling mill. The samples were air cooled from the rolling temperature, with the exception that the high hardenability alloy grades were slow cooled. Sections for microscopic examination were taken in a manner to include a cross section of the notch. To produce steel type defects essentially the same procedure was followed, except that the samples were notched before

Fig. 3

75 X

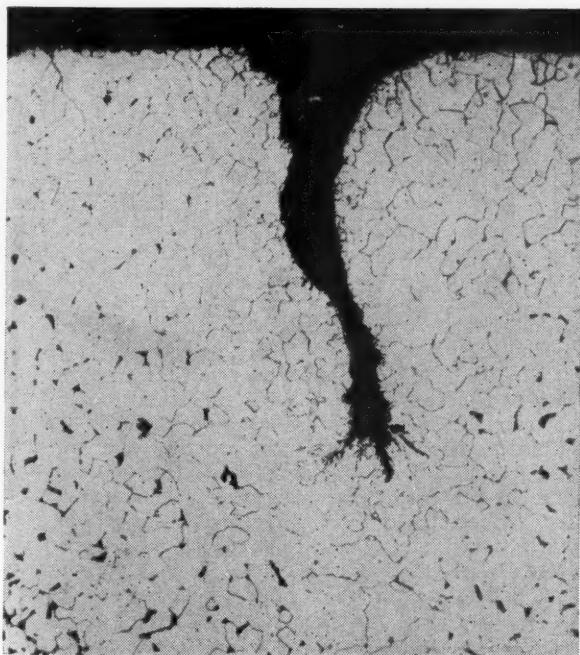


Fig. 4

400 X



instead of after heating at 2,000 or 2,150 deg. F. for periods of one or three hours.

Fig. 1 illustrates a characteristic mechanical type synthetic defect photographed at low magnification. Fig. 2 shows the lowermost portion of the same defect photographed at high magnification. In both illustrations there is essentially no evidence of oxide penetration. Fig. 3 depicts a characteristic steel type synthetic defect photographed at low magnification and Fig. 4 again shows the lowermost portion of the same defect photographed at high magnification. In both illustrations, the penetration of oxide is in evidence, and the pronounced difference in the two types of defects becomes quite apparent upon comparison of the two photographs at high magnification. In both illustrations, the penetration of oxide is in evidence, and the pronounced difference in the two types of defects becomes quite apparent upon comparison of the two photographs at high magnification. This characteristic difference has applied to all cases examined.

To illustrate the application of the method of examination to actual cases a number of billet samples representing several grades of steel were obtained from material that had been set aside for surface conditioning. Where surface defects were found, sections containing them were cut from billets and, without further treatment, the sections were polished, etched, and examined under the microscope. The method should be readily applicable to the examination of defects in almost all grades of primary rolled steel products, although there may be some grades like the 18-8 stainless steel that do not respond.

The method may also be applied to secondary rolled products, although it will be well to consider a limitation of the method in this respect. In rerolled products surface defects which have occurred solely as a result of the secondary rolling operation may be called mechanical type defects. Those which existed prior to the secondary rolling, whether they occurred as mechanical type defects from the primary rolling or whether they carried through as existing defects

from the ingot or from the heating operations for primary or secondary rolling, may be referred to as steel type defects. This means that the method is not usable for tracing the origin of the defects in either finished or semi-finished products to conditions that may have existed prior to the heating operation for either kind of rolling, except that it may usually be inferred that defects of the nature of those being considered generally do not occur from the heating operations. Where, for example, the steel has been "burned" in the process of heating for rolling, such cases may be determined by visual inspection or other usual means.

Consideration has been given to the possibility that subscale formed on the surface metal as a normal result of scaling during the heating operation may become entrapped within a mechanical defect such as a lap and, as a result, the flaw may be misjudged as a steel type defect. This condition was not observed in the work on synthetic mechanical type defects, except in the case of the high silicon, A-9260 grade, where entrapped oxide was noted on the samples which had been notched prior to rolling. However, when the mechanical type defects were formed after the billets of A-9260 had been given two light passes through the rolls, no oxide penetration was found around the defects. This fact considered with the oxide penetration observed around steel type defects indicates that the action of the rolls in breaking and removing the scale on the surface will also remove the evidence of penetrated oxide unless it has occurred within an already existing flaw.

Attention is directed to the occurrence of metal decarburization adjacent to both types of defects. Generally the decarburization is less in the cases of mechanical type defects because of lower temperature and shorter time at temperature during rolling than during heating. Since, however, the degree of decarburization is itself a function of time and temperature and is variable for the different grade of steel, it will be a less reliable guide to a determination of defect origin than will the occurrence of oxide penetration.

## COMMUNICATION

### Horse-Trading Better Than Wholesale Consolidation

A CITY IN OHIO

#### TO THE EDITOR:

We now and then still hear about "consolidating the railroads into a small number of systems"—always with the inference expressed or implied that we are missing something in not having just a few large systems instead of a much larger number of systems, some of which are already quite large.

Does largeness automatically bring efficiency? Does it mean simplification? Does it bring supplier and user of transportation closer together? With a limited number of large railroad systems, would not the step to government ownership be much easier to take? No successful baseball magnate would think of consolidating two entire teams. It would be ruinous to do so. He knows his weak spots and trades or buys players to strengthen the weak spots. Why cannot railroads trade and buy and sell parts

of their lines so as to strengthen their systems and improve the service?

We have a sample of each method under consideration now. The Santa Fe wants to buy its way into St. Louis. That's quite like the Tigers buying a good shortstop. The C. & O. wants to take over the N. Y. C. That's like the Tigers trying to buy the Boston Red Sox. Why does not the C. & O. try to buy running rights over the Southern into St. Louis, instead of trying to buy the entire N. Y. C. System so it may have, among other things, a line into St. Louis? Many trades of branch lines or outright sales could be made with large benefits to all concerned, including the public.

If N. Y. C. is in need of money—as Mr. Young would have us believe—why does it not try to sell its old Ohio Central Division to the Virginian, which might now be pleased to have a line to the lakes. Should a few such trades or branch line purchases be worked out, we may well have an era of rearrangement of our systems in the direction of increased efficiency and a strengthening of branches which may now be drags on their owners. In every household there is furniture for which the owners have limited use but which others could put to good use.

AN INDUSTRIAL TRAFFIC MANAGER

# UNION PACIFIC USES BULKHEADS FOR L.C.L.

**Dividers and Segregation gates positioned by straps and wall plates cost little but cut loss and damage**

As a result of intensive study the Union Pacific, in August, 1942, adopted bulkheads and segregation gates as regular equipment at its freighthouses and transfer platforms for the handling of l.c.l. shipments. Their value from a standpoint of loss and damage prevention has been amply demonstrated since that time.

Standard car-width bulkheads of two heights were designed and are currently in use. A 6-ft.-high bulkhead—designated as No. 1, of which 2,407 were manufactured and placed in use—cost \$3.17 apiece to manufacture. Bulkheads 8 ft. high—designated No. 2, of which 7,575 were placed in service—cost \$3.33 per unit. In addition, segregation gates, a smaller scale device designed to separate and protect fragile packages from so-called "rough freight," are in regular use, a total of 14,281 having been manufactured, at a unit cost of \$1.15. All bulkheads and gates were constructed at a reclamation plant operated by the stores department of the road at Evanston, Wyo.

## Details of Bulkhead Construction

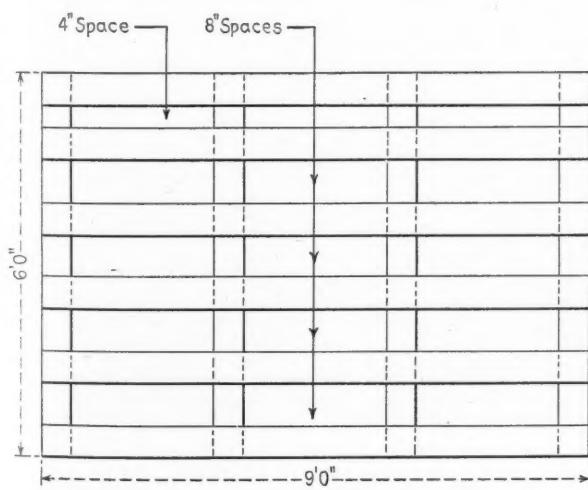
The bulkheads—the dimensions of which are set forth in the drawing—are constructed of 1-in. by 6-in. rough fir lumber securely fastened together with nails, which nails are carefully clinched to insure holding strength as well as a smooth surface. As installed in



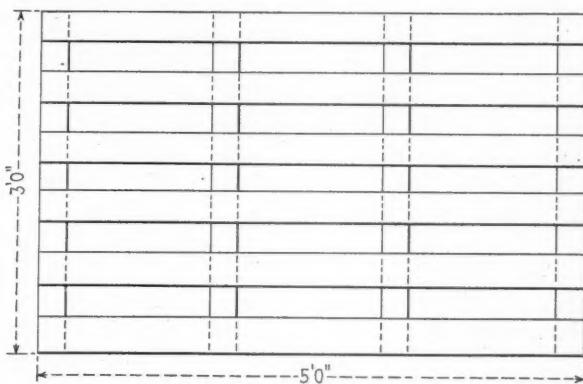
Bulkheads of this design, which are strapped to metal plates attached to the side walls, give lading first-class protection on the Union Pacific.

merchandise cars, the bulkheads are held in place by the use of steel straps or bands, the ends of which are securely held in place by conventional anchor plates which are nailed to the side walls; the other ends of the metal straps are passed around the bulkheads and clinched with a machine supplied for that purpose. This serves to keep bulkheads and freight firmly in place and prevents shifting or falling.

As an illustration, a portion of a carload of l.c.l. freight for one town may be compactly loaded, floor to roof, and be secured by a bulkhead for protection until such time as it arrives at the unloading point. The remainder of the space in the car may be similarly utilized, divided and braced by use of a bulkhead. This serves to prevent shifting, falling or mixing, which is



Left—Bulkhead No. 1, made of 1 in. by 6 in. rough fir lumber, is 6 ft. high. Units of this size have now been in use for more than five years on the U.P. Below—Segregation gates made of 1 in. by 6 in. rough fir lumber and used to separate fragile from rough freight are 3 ft. high. They may also be placed horizontally between layers of heavy loads to distribute overhead weight.



more likely to occur in the absence of a bulkhead. Hence, it serves to minimize damage.

#### Makes for Flexibility

Should a substantial portion of the load be freight for one station, as often is the case, it can be unloaded upon arrival at its destination with much less difficulty and delay than if mixed with freight for other points, as frequently is true in the absence of bulkheads. The remaining freight can then be rearranged in station order to facilitate prompt unloading; this is especially desirable in the operation of a peddler car, from which freight normally is unloaded by the train crew. Should a car contain a substantial portion for some station intermediate to the destination of the car, if divided and protected by a bulkhead such merchandise may be unloaded promptly without confusion and, in the interest of car conservation, other freight loaded into the same space, after which the car may resume its journey with a minimum amount of delay—one car sufficing where two cars otherwise might be required.

#### Segregation Gates

The segregation gates, which are similar to bulkheads, but smaller, are used to segregate and protect fragile packages and other freight susceptible to damage from "rough freight," or freight of such a nature as to cause damage to other freight with which it may come in contact. In addition, they are used as dividers between layers, or tiers of freight, or between different

portions of the load to distribute the overhead weight better and prevent damage from contact with other packages.

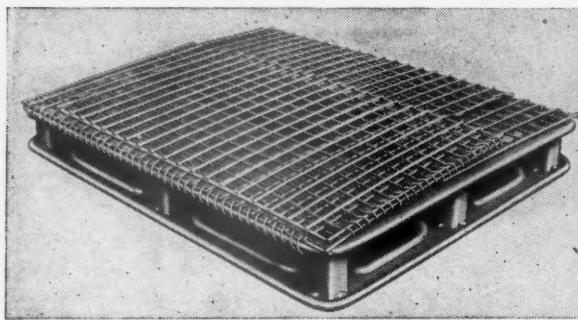
The metal strapping and bands mentioned above are particularly useful and adaptable for securing in place various kinds of containers, such as barrels, pails, machinery, batteries and other articles subject to possible damage or liable to damage other freight if unsecured.

O. J. Wullstein, general freight claim agent, in charge of the bulkheading program, points out that a carload of merchandise, with one half of the load protected by bulkheads, was involved in a derailment at a point in Kansas last year. The car rolled completely over three times, coming to rest right side up, after which it was promptly rerailed and moved into Kansas City, where the bulkhead was found to be intact and the freight in that end of the car free of damage. In this connection it must be noted that bulkheading alone would not have saved the lading from damage in the absence of good containers.

"We on Union Pacific are firmly convinced of the value of bulkheads and segregation gates," Mr. Wullstein declares. "Union Pacific pioneered their use in the west and currently is a leader in advocating their adoption on a national basis. The universal use of such safeguards would be a big step toward reducing the annual \$100,000,000 rail freight loss and damage bill that is working to the detriment of everyone in these days of peak prices and scarcities."

## COLLAPSIBLE METAL BOX PALLET

A new metal pallet of the box type is a late addition of the Monroe Auto Equipment Company, Monroe, Mich., to its line of material handling equipment. This pallet's sides, made of 8-gage steel wire, 24 in. in height, are collapsible. These sides, when mounted on the Monroe

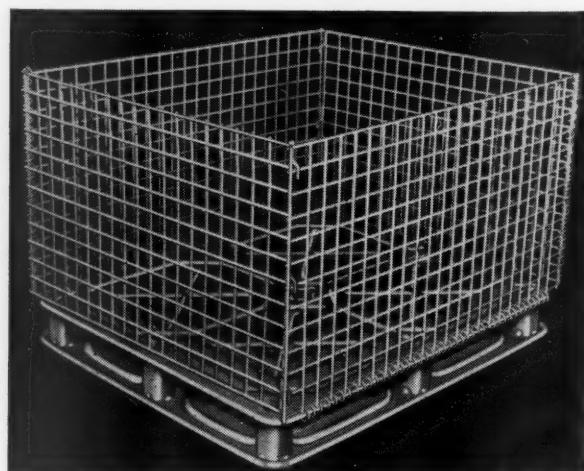


Monroe box pallet collapsed for storage or shipment light

eight-way (entry), all-steel, 40-48-in. pallet as a base, form a container for handling and shipping of loose material. When not in use or when being returned

empty, the wire sides fold down onto the top of the pallet, forming a unit whose depth is reported as only 7½ in., to effect savings in shipping and storage space. Weight of the unit is 142 or 169 lb., depending on whether the 69- or 96-lb. base pallet is used.

Capacity of this unit is given as 2,500 to 5,000 lb. in single loads, and 15,000 to 35,000 lb. in tiered loads, for which stakes are available. Cubic capacity is rated as slightly less than 27 cu. ft.



Metal wire sides can be seen in this view

# GENERAL NEWS

## Sale of Barge Lines Urged by Railroads

### Ending of government subsidy advocated by carrier spokesmen

Approval of legislation providing for the disposal of the transportation facilities of the Federal Barge Lines, operated by the government-owned Inland Waterways Corporation, was advocated by the railroads last week in hearings conducted before a subcommittee of the House committee on interstate and foreign commerce. The railroads' views were presented by Dr. J. H. Parmelee, vice-president of the Association of American Railroads, and director of its Bureau of Railway Economics, and J. M. Hood, president of the American Short Line Railroad Association.

The measures involved are H.R. 5318 and H.R. 5476, both sponsored by Representative Wolverton, Republican of New Jersey, and chairman of the full committee. As reported in *Railway Age* of February 14, page 69, H.R. 5318 would, in part, authorize the Secretary of Commerce to sell, lease or otherwise dispose of I.W.C. properties, provided the purchaser or lessee, which could not be railroad or railroad affiliate, agreed to continue the facilities in common-carrier service in manner "substantially similar" to the service rendered by the I.W.C., "with due regard to the transportation needs of the areas served." The restriction against affiliate would not apply to the I.W.C.'s Warrior River division.

Testifying with respect to H.R. 5318, Dr. Parmelee proposed amendments designed to remove those provisions of the bill restricting (1) the sale of the facilities and rights of the I.W.C. to two alternatives—either as an undivided whole or as two separate units, the Mississippi River unit and the Warrior River unit—and (2) the sale or sales to persons or corporations that will agree to continue the common-carrier service in a manner substantially similar to that rendered by the I.W.C. The railroads' spokesman also suggested that the provision directing the secretary of commerce to dissolve the I.W.C. and liquidate all its affairs by July 1, 1953, be moved forward to not later than July 1, 1951. The secretary of commerce, he said, should be authorized to dispose of the facilities in any way, or to subdivide them into as many parcels as he may find appropriate, adding that three years should be ample time in which to ascertain whether or not the I.W.C. or any

of its parts can be disposed of to advantage.

Earlier, Dr. Parmelee told the subcommittee that disposal and liquidation of the I.W.C. would be directly in line with the National Transportation Policy as enunciated by Congress in the Transportation Act of 1940. According to the A.A.R. officer, the government's investment in the I.W.C., which he described as a "socialistic experiment in transportation," totaled \$22,362,843, as of December 31, 1945. If the I.W.C. had been required to pay the government a return of as little as 3 per cent annually on the government's \$22 million investment, he said, the I.W.C. would have had a "much larger deficit"—several million dollars more than it actually incurred. "This freedom from earning a return is, of course, an outright government subsidy," he asserted.

Dr. Parmelee observed that the net deficit of the I.W.C. was \$1,338,000 for the first seven months of 1947 and \$6,563,000 for the 8½ years ended July 31, 1947. He also referred to the findings last year of a subcommittee on small business which, he said, recommended that the government should "get out of the barge business." The significant feature of the report of that group, (see *Railway Age* of June 14, 1947, page 1230), according to Dr. Parmelee, was its emphasis on the recommendation that "this socialistic enterprise should be brought to a close."

"Like grandfather's clock," he continued, "the Inland Waterways Corporation has been gradually running down. Operating at almost a steady loss during the last 10 years, the enterprise faces the alternative prospect of going out of business because it is physically unable to continue, or receiving a shot in the arm in the shape of government appropriations. Such appropriations would have to be made for two purposes: first, to supply funds, perhaps to the amount of \$17,000,000 or more, for the purpose of financing new equipment, and second, to meet the recurrent and growing deficits from operation."

Contending that the government ultimately will find it more difficult to dispose of the barge lines if it "sinks" more money into them, Dr. Parmelee said that the government does not owe to any small group of shippers an obligation to see that they continue to receive transportation services at less than cost, either from the government or from private operators. "On the contrary," he went on, "government efforts, we think, should be directed to the elimination of discrimination in

transportation, rather than continued encouragement of preferred treatment to a small group of shippers."

Confining his remarks to H.R. 5476, Mr. Hood "heartily" endorsed the idea of terminating government operation of a competing transportation system at an early date. He conceded, however, that such termination should be coincident with the inauguration by private interests of a similar service, or "at least that part of the service now rendered vital to the shipping public." "Subject to regulation by the Interstate Commerce Commission and a finding by that body that a proposed purchaser is willing, ready and able to provide the necessary service, there would appear to be no compelling or convincing reason why any person or corporation should be excluded as a possible purchaser," he said.

Mr. Hood said his views were not intended to suggest that Congress should not, by adequate safeguard, insure against a prospective purchaser merely using the barge line or barge lines as a means of drying up competition. The commission, he said, is well qualified and perfectly able to detect any such intention or possibility and to withhold a finding that the particular sale would be in the public interest.

Among other witnesses appearing before the House group, Under Secretary of Commerce W. C. Foster would attach an amendment to H.R. 5318 to provide for the dissolution of the I.W.C. five years after the disposition of the Mississippi River division. "If a bill of this type is not passed," he said, "the Department of Commerce will have to continue government operation of the transportation facilities of the . . . corporation on the present basis for the indefinite future with no practical possibility of turning over this task to private enterprise should private enterprise be willing to assume it. On the other hand, if it is passed, it does not follow that a sale in the immediate future would result."

At the same time, Mr. Foster advocated the defeat of H.R. 5476. If that bill were to become law, he contended, it is very unlikely that the sale of the facilities of the I.W.C. could be worked out in a way which would result in a continuation of the common-carrier service presently provided by the I.W.C. "In my position as under secretary of commerce," he said, "I can state that the officials of the department will not agree to any sale which does not fully protect both the inter-

ests of the government and interests of the shippers in the regions served by the . . . corporation."

Representing the New Orleans, La., Traffic and Transportation Bureau, L. A. Schwartz advised the subcommittee that the bureau does not oppose transfer of the I.W.C.'s operations to a private company, provided the private company is required to continue the same service and rate set-up.

"The bureau," he said, "is on record that any legislation to be passed include first, a proviso that in the event a purchaser does not succeed in operating the line successfully, and, as a result, operations cease or are curtailed below the service now rendered by the Federal Barge Lines, the government shall automatically resume operations of the . . . lines immediately without any interruption of the service; and, secondly, a proviso that the . . . corporation shall not be liquidated by July 1, 1953, or at any time, but be kept as a standby corporation to resume operations should it become necessary."

R. A. Steigler, representing the New Orleans Board of Trade, declared that the service rendered by the F.B.L. is "so important to us that if it is transferred to private ownership, we should have sufficient safeguards to insure its continuation as a pioneer and not as a mere instrumentality for making a profit." The F.B.L., he said, has helped to prevent rate wars between the railroads and the barge lines.

The subcommittee also heard objections to H.R. 5476 from Representative Ploeser, Republican of Missouri, and chairman of the House small business subcommittee which recommended disposal of the I.W.C. facilities. An advocate of H.R. 5318, Mr. Ploeser protested principally to the provision in H.R. 5476 calling for a cash sale of the F.B.L. to the highest bidder and on a so-called "parcelling out" basis. He also declared that there was need for the continued development of barge service on the Missouri river, where, he said, the F.B.L. was presently the only carrier offering such service.

Opposition to the sale of the F.B.L., unless Congress "safeguards the pioneering operations" of the I.W.C. on the Missouri river, also was voiced by H. O. Benson, representing the Sioux City, Ia., Chamber of Commerce. Mr. Benson, whose views were supported by spokesmen for Kansas City, Kans., and Omaha, Nebr., civic groups, asserted that Congress was "morally obligated" to carry out pioneer work on the Missouri. Such work, he said, should be "started at once."

Although he acknowledged that there has been a monetary loss in the operation of the F.B.L., Mr. Benson held that areas tributary to the Illinois, Mississippi and Ohio Rivers were able to "recoup" such losses by the use of reduced transportation costs. Such losses, he assured the House group,

will not apply on the Missouri river "as we can profit by errors committed in pioneering on other rivers."

Representative Mundt, Republican of South Dakota, another witness, also contended that it would be in the public interest to sell the F.B.L. until "pioneer work" on the Missouri is completed.

for several years as chairman of the Senate committee on interstate commerce. His argument included a suggestion that interlocking directorates should be considered as affording "the simplest and safest means of verifying considered but necessarily tentative conclusions" with respect to unifications; "otherwise the provisions of section 5, designed to facilitate unifications, will become a nullity, permitting the guesswork of trial and error mergers, rather than careful planning, tested in the fire of experience and day-to-day consultation."

On the other hand, the chief counsel for the Virginian, Wilbur LaRoe, Jr., argued that the applicants were "trying to get a pre-judgment of a section (5)(2) case," since, as Mr. La Roe read the record, it indicated that "nothing less than union" would satisfy the requirements of the presently-proposed C. & O.-N. Y. C. relationship. Mr. LaRoe also charged that Mr. Young wanted to use "control" of the Central to "dominate" the Association of American Railroads. "Our friends," the Virginian counsel continued, "want to play with the New York Central and experiment with it without knowing whether they are going. They want to see how far Mr. Young can get in dominating the railroads of the United States. Mr. Young loves to experiment, loves to play with railroads."

All 11 members of the commission were on the bench and their questions indicated a keen interest in various phases of the case in which Assistant Director C. E. Boles of the commission's Bureau of Finance has made a proposed report recommending denial of the petitions and application.

Counsel for the petitioners and applicants argued generally that, while they had made a full disclosure of their hopes for eventual unification of the C. & O. and N. Y. C., their present proposal contemplated nothing more than interlocking directorships which would not give them control of the Central "or the power to control that carrier." The principal opposition to the proposals came from the Virginian, and its counsel asked the commission to serve a divestment order on the C. & O. on the basis of a finding that the acquisition of the N. Y. C. stock was in violation of the Clayton Act. Opposition counsel also argued that the proposed set-up would amount to acquisition of control of the Central without the filing of an application under the Interstate Commerce Act's section 5(2) and otherwise meeting the requirements of that section.

The Young and Bowman applications were filed under section 20a(12) which prohibits any person from holding the position of officer or director of more than one road, unless the commission authorizes it on the basis of a finding that "neither private nor public interests will be adversely affected thereby." Among counsel for Messrs. Young and Bowman was Burton K. Wheeler, former senator from Montana, who served

Other opposition to the proposals was voiced by counsel for the Chrysler Corporation and Packard Motor Car Company; representatives of the city of Norfolk, Va., and the Princeton (W. Va.) Chamber of Commerce; and George S. Jackson of New York, a C. & O. stockholder whose recent questions regarding that road's policies and activities brought from President Bowman the reply reported elsewhere in this issue. The Chrysler-Packard interest, as set out by its counsel, Parker McCollester, is in freight rates on new automobiles out of the Detroit area, it being their position that N. Y. C., the leading proponent of a lower scale, might take a different point of view if associated with the C. & O., which has favored the present adjustment.

J. C. Kauffman, general counsel of the C. & O., was in charge of the presentation made on behalf of the petitioners and applicants. He opened with an argument directed mainly to the legal questions involved, emphasizing that control of the Central is not sought "at the present time." At the same time, he contended that the evidence, relating to the hope of ultimate unification was properly placed before the commission so that it might better appraise the proposed "first step." Commissioner Aitchison suggested that commission consideration of a unification proposal under section (5)(2) would require, among other procedures, that governors of interested states be notified; but Mr. Kauffman insisted that no section (5)(2) application was called for at this time

when the commission was merely being advised frankly of the ultimate "purposes and expectations" of the applicants and petitioners.

Mr. Kauffman suggested that the situation resulting from the present proposals would not be essentially different from the New York, New Haven & Hartford set-up where directorships were recently approved for insurance company and bank representatives who were also directors of other roads. Whereupon Commissioner Mahaffie asked if the applicants would be satisfied with a time limit on their N. Y. C. directorships, as was done in the New Haven case. That, Mr. Kauffman replied, "wouldn't be what we asked for, but it would give us an opportunity to show the benefits of our objective."

If hopes for C. & O.-N. Y. C. unification were realized, Mr. Kauffman said, the result would be a system comparable with what he called the "Pennsylvania-Norfolk & Western-Wabash" system. Commissioner Mitchell asked if there were any evidence of record to "convince" the commission that there would be unification in the future; as he otherwise put it, the commissioner wanted to know if the talk of unification were merely the outline of a "dream." Mr. Kauffman said such talk was about "things foreseen," because they seemed, "so logical." Commissioner Mitchell later told Mr. Kauffman that "if I were sure where you are going, I might have a different idea."

Meanwhile, the C. & O. counsel had outlined the applicants' view that the C. & O. and N. Y. C. are complementary systems as to the nature of their traffic and thus admirably suited to consolidation. Before that stage is reached, he also said, the operations of the two roads "are susceptible of a high degree of coordination which would result in better service at lower cost, and consequent improvements in the gross and net income of both companies."

When Mr. Kauffman stated that the commission had "recognized the kind of constructive leadership that Mr. Young and Mr. Bowman are prepared to bring into Central's affairs," Commissioner Mahaffie called the C. & O. counsel's attention to the fact that the expression he had in mind was made by the commission's Division 4. The citation was of the division's June, 1945, decision which approved Alleghany's control of C. & O. on condition that certain existing or subsequently-acquired C. & O. and Alleghany holdings in railroads be deposited with an independent voting trustee. That is the trusteeship under which the C. & O.'s N. Y. C. stock has been deposited, the trustee being the Chase National Bank of New York.

As he proceeded with his argument, Mr. Kauffman said that "Alleghany and Chesapeake, under Mr. Young's leadership, have become the symbol of railroad progress, being "largely instrumental" in procuring "reforms," including "the eradication of the 'black market' in

Pullman reservations." Here Commissioner Johnson, who is also director of the Office of Defense Transportation, asked: "When did you start after the 'black markets'?" When Mr. Kauffman replied "a couple of years ago," Colonel Johnson asked the C. & O. counsel if he knew people were arrested for "black-market" sales of reservations "four years ago when others started after it." Mr. Kauffman said that he was aware of that earlier drive, and the O. D. T. director followed through to ask: "Then, why take credit for it?" Whereupon Commissioner Mitchell observed that the commission has been receiving from a Florida hotel association letters indicating that "black-market" conditions "are now worse than ever."

When Commissioner Barnard pointed out that the C. & O. hasn't made its passenger operations profitable, Mr. Kauffman replied that conditions for profitable passenger operations were not present on the road, where such operations were "more of a public service." Mr. Barnard also asked which would be the "first love" of Messrs. Young and Bowman in cases where C. & O. and N. Y. C. interests might conflict. Mr. Kauffman replied that his clients would "stand aside" if such cases arose. And that prompted Commissioner Aitchison to raise a question as to whether directors could do that and still discharge the full duties of their directorships. Mr. Kauffman thought they could.

With respect to the opposition, Mr. Kauffman pointed out, as he put it, "how significant it is that in a project of this scope and magnitude, so little real opposition should have been engendered." He had previously argued that the "private interests" which must not be "adversely affected" by interlocking directorships approved by the commission under section 20a(12) are only "the interests of the companies immediately involved and their security holders."

Former Senator Wheeler also made that argument, asserting that such interpretation "accords with the interpretation intended by Congress," since Congress did not change the language when it enacted the Transportation Act of 1940 although it knew that the commission had been deciding directorship cases on that basis.

Mr. Wheeler also recalled that when the consolidation-plan provisions of the act were in effect, favorable reports of the commission in section 20a(12) directorship cases were bottomed on "the basic finding that a consolidation of the roads in question was in the public interest." Now that the consolidation-plan provisions have been repealed, Mr. Wheeler suggested that the "public and private interests standard of section 20a(12)" is fulfilled "when a private person in lieu of the commission demonstrates that two or more carriers can beneficially be consolidated or unified."

Twice Mr. Wheeler called Mr. Young a "financial genius," and the former

senator also expressed his belief that "Mr. Bowman's talents in the operating field are beyond question." Their motives in making the present proposals, he said, were "not altogether altruistic"; they were motives "of enlightened self-interest in the C. & O., for Messrs. Young and Bowman "recognize that the C. & O., regardless of its financial strength, has a stake and responsibility in the general welfare of roads in eastern territory."

The C. & O. chairman and president "are now offering their services to the solution of financial and operating problems of one of the nation's great railroads," Mr. Wheeler continued, adding that "to say that the New York Central board needs new blood is an understatement."

He also told the commission: "While you may criticize some of Mr. Young's methods as being spectacular, no one can deny his achievements. I suggest to you that sometimes spectacular methods are required. Final judgment must be based on the results achieved. Even as chairman of the Senate interstate and foreign commerce committee, my suggestions for through service and competitive bidding on securities) were in vain. I appealed to railroad presidents and to A. A. R. for years. Not until I discussed these improvements with Mr. Young was corrective action initiated."

When Commissioner Mahaffie asked if Montana people would acquiesce in a merger of the Northern Pacific and Great Northern, Mr. Wheeler recalled that he had opposed that merger proposal of the past and said perhaps he would again be in opposition if he were a representative in Congress of a Montana constituency. However, he went on to suggest to Mr. Mahaffie that the commission "is in a different position, representing the general public interest," and if it found that a proposed merger of "the northerns" would be in the public interest, it would be its duty to approve the proposal.

In opening his opposition argument Mr. LaRoe stated that the Virginian was in the case because it fears impairment of those relationships with the Central which have permitted it to build up a substantial traffic movement via the so-called Deepwater Bridge route. That is the route between the southeast and the west over the Virginian to Deepwater, W. Va., where the Deepwater bridge over the Kanawha river provides a connection with the Central. Before that bridge was constructed, the Virginian was a "stub-end coal carrier," Mr. LaRoe said; and he identified the C. & O. as having been the Virginian's "chief enemy" in the 1929-30 proceeding wherein it obtained authority from the commission to construct the bridge.

The "cornerstone" of the case made on behalf of the petitioners and applicants, Mr. LaRoe asserted, is a plan "to take traffic away from other railroads." And he insisted that this must be considered by the commission in ap-



The first of three "recreation cars" being built for the Pennsylvania by the American Car & Foundry Co. has been delivered and soon will go into regular service on the "Jeffersonian," overnight coach train between New York and St. Louis, Mo. (See the *Railway Age* of November 1, 1947, page 50.) The car provides a reading and game room for adults, a sunken buffet lounge, a built-in newsreel theater and a playroom for children. Above is shown the buffet lounge, the wall decorations of which include paintings of ancient goblets and drinking vessels of various national origins. Below is the reading and game room with the adjoining playroom for children. In the game room are settees, inlaid tables for checkers, chess, backgammon and cards and murals depicting old playing cards.



plying the section 20a(12) requirement that interlocking directorships must not adversely affect "public or private interests." Granting of the petition and applications, Mr. LaRoe continued, would "dynamite" the Deepwater bridge and previous commission pronouncements to the effect that an N. Y. C.-Virginian tie-up was logical.

He went on to assert that the petitioners and applicants were unable to show that there was not substantial competition between the C. & O. and N. Y. C.; so they "had to use the uni-

fication evidence." Mr. Kauffman, Mr. LaRoe said, was in a position wherein he "must argue legally that there will be no control," yet as the Virginian counsel read some of the Young and Bowman testimony, the C. & O. chairman and president "have so much confidence in themselves" that they expect their "mere presence" on the board to up them in a position to control N. Y. C. policies. At another point Mr. LaRoe asked how the Central's independence was to be preserved if the Young-Bowman plans as outlined were carried out.

With respect to his charge that the acquisition by C. & O. of the N. Y. C. stock was in violation of the Clayton Act, Mr. LaRoe said that the trusteee of the stock did not remove the alleged violation. Thus his call upon the commission to issue a divestment order.

Stockholder Jackson's presentation was to a large extent a discussion of points raised in his recent letter to C. & O. President Bowman (see *Railway Age* of January 31, page 50). Mr. Jackson also referred briefly to another letter he wrote to Mr. Bowman on February 7, sending a copy to the commission which placed it in its file of correspondence relating to the present proceedings. One matter covered by Mr. Jackson was in the February 7 letter, and referred to by him in the argument, was his suggestion that the C. & O. management had made an overpayment of preferred dividends last year.

"In respect to the dividends on the preferred stocks," Mr. Jackson wrote to Mr. Bowman, "the proxy statement sent to the stockholders for the April 23, 1947, meeting said: 'Dividends on the 3½ per cent convertible preferred stock will be cumulative at the rate of 3½ per cent per annum from the date upon which the merger of Pere Marquette becomes effective, such dividends being payable quarterly on the first days of February, May, August and November.' That wording is clear, precise and subject to literal interpretation . . . The merger was declared effective on June 6, 1947. The first full quarterly payment was made to preferred stockholders of record on July 7. As a result, those stockholders received two months dividends to which they were not entitled. I request, therefore, that you take action without delay to recover this preferred dividend overpayment of about \$117,000."

The session ended with the rebuttal argument of Lawrence Chaffee, C. & O. general counsel, who confined his remarks largely to a discussion of the Virginian's presentation with respect to the traffic it might lose. The Virginian owns only 175 box cars, Mr. Chaffee said, adding that "optimistic forecasts" made in the Deepwater Bridge case as to traffic that would move over that route "have not been borne out."

#### Railroad Industry's Importance Is Theme of Kansas City Broadcasts

A series of weekly radio programs designed to publicize the important role played by railroads in the growth and prosperity of Kansas City, Mo., has been inaugurated on station KCKN in that city. The programs are presented each Sunday at 5:45 p.m., and are scheduled to continue through April 25.

Each broadcast presents a different phase of railroad operation and features an interesting story about one of the 12 railroads serving Kansas City. Many officers of the various Kansas City roads will be interviewed in the course

of the program series. The Association of American Railroads, in addition to the local roads, is cooperating in developing the factual information on which the programs are based. Assisting in the presentation of the broadcasts is George K. Reeder, formerly general freight agent of the Missouri-Kansas-Texas, and now southwestern representative for the port of Houston, Tex., with offices in Kansas City.

### Special Fittings Facilitate Brake-Pipe Repairs

In a circular letter dated February 12, the secretary of the Association of American Railroads Mechanical Division called attention to new Item 100, added to Interchange Rule 101 effective January 1, 1948, which is preceded by a note reading: "Note.—Air-Brake pipe on AB brake equipment, broken at threaded portion of the flange fitting, may be repaired by the use of Wabco-grip or Flexigrip fittings (or other A.A.R. approved types), as correct repairs, charge to be based on material applied, plus labor of application." The letter stated that the use of these fittings should greatly facilitate repairs to broken air-brake pipe and suggested more general attention to this ruling.

### Santa Fe Marks 100 Million Diesel-Miles

Commemorating 100 million miles of Diesel-engine operation and the beginning, on February 29, of daily schedules of the "Super Chief" and "El Capitan," Fred G. Gurley, president of the Atchison, Topeka & Santa Fe, outlined the road's program of service and advancement before approximately 1,200 guests at a luncheon in Chicago on February 26.

"The Diesel locomotive is a comparatively new transportation tool," Mr. Gurley stated. "It became available for road service during the depression of the Thirties. Santa Fe purchased its first Diesel at that time, and the fact that we may commemorate 100 million miles of Diesel operation today is a good answer to those who would have you believe the railroads are not alert to new methods or new technologies."

The "Super Chief" was inaugurated experimentally as a once-a-week train in 1936, the railroad's head reminded his audience. Santa Fe's passenger revenues that year were only 40 per cent of what they had been in the year of the stock market collapse of 1929. "El Capitan" began service about two years after the establishment of the "Super Chief." Each have the same running time between Chicago and Los Angeles.

Said Mr. Gurley: "There were doubts and misgivings in those days about the patronage of these or any other railroad trains. We had experienced the traffic diversions to the splendid highways financed substantially by government, and the fostering attitude toward air

transportation which later became so pronounced was then apparent. Take your courage in hand, finance the equipment somehow, hope for the best and go ahead, was the only thing that could be done by the only transportation agency which did not then, nor does not now, receive a subsidy from the government.

"No one 'phoned my office then for help in securing accommodations. On the other hand, we 'phoned our friends urging them to come to the stations. They could get on the train any time without notice.

"The most amazing experience of my life," Mr. Gurley stated, "is the complete reversal in our passenger traffic picture. Santa Fe passenger revenue in 1947 were 220 per cent more than in the year when the first 'Super Chief' started as a once-a-week experiment.

"We hear criticisms of the reservation system and we know we make mistakes, but after careful personal examination I am convinced that our officers and employes of the reservation bureau do a good job. Theirs is a difficult task because there is no satisfactory way to distribute a shortage. People want what they want when they want it.

"There is only one solution, from the standpoint of the public—equipment and services equal to the demand. These new trains will help in that regard. We know that good service means much more than passenger equipment, and yet you cannot give first class service without good equipment."

### Maintaining Brake Beams And Attachments

The Association of American Railroads Mechanical Division reports an increasing number of brakebeam failures on cars in service and that trains are arriving at terminals with brake beams down or dragging, each of these cases constituting a potential derailment. To avoid potential failures, the division recommends that instructions be issued to all concerned to carefully inspect and repair or replace (where necessary) brake beams and attachments—in train yards, at freight houses and when cars are on repair tracks.

### Rule Proposals Tactical Clubs, Carriers Tell Emergency Board

Hearings before the Presidential emergency board on the demands of the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen & Enginemen, and the Switchmen's Union of North America for a wage increase and changes in working rules continued at Chicago, with the railroads presenting additional testimony. The carriers completed presentation of their argument against the 30 per cent (\$3 daily minimum) wage increase on February 24 and shifted their attack to the unions' 25 rule change proposals.

D. P. Loomis, executive director of the Association of Western Railways, Chicago, testified that the brotherhoods' rule proposals had been used as "clubs" in 1941, 1943 and 1946 in order to compel wage increases in excess of those recommended by the emergency boards. He quoted some of the testimony of Alvanley Johnston, grand chief engineer, B.L.E., before the 1946 emergency board in which the union head, when asked if certain rule proposals would have been pressed had the recommended money increase been greater, declared, "If we had gotten enough out of the first one (emergency board), we probably wouldn't have done it. But we couldn't get it on account of the 'little steel formula,' as I said, we became sort of a Stonewall Jackson. We came around to the side. We made a flank movement and we got what we wanted."

Mr. Loomis explained how the amicable settlement on demands practically identical to those of the three "hold-out" unions had been negotiated with the Order of Railway Conductors and the Brotherhood of Railroad Trainmen last November, but stated that it was the opinion of the Carriers' Conference Committees that this settlement with the train service organizations was more generous than could be justified on a strictly economic basis, but represented as good a result as could have been obtained under the circumstances.

E. B. Perry, assistant vice president, New York, New Haven & Hartford, told the board that adoption of the unions' rule proposals would destroy long-standing pay relationships between freight, yard and passenger service employees. Mr. Perry's evidence showed that the railroad operating unions had gradually but persistently extended and enlarged their control over matters which rightfully were the prerogative of management, including the right to assign work, the size and character of the working forces, and the designation of the times and places of employment. Some of the rules, he stated, require payment for time not worked and payment of multiple compensation for single service. These conditions have come about through the imposition on management of rules and interpretation of existing rules by various boards and administrative agencies in whose hands the authority to determine such matters has been vested by statute, executive order, or agreement of both parties, Mr. Perry continued, and by the exercise of economic force by the unions.

L. W. Horning, vice president, New York Central, testified in behalf of the carriers on the union-proposed rule to establish a 6-within-8 hr. day instead of the existing 8-within-10 hr. day for engineers and firemen in short turn-around passenger service. Mr. Horning explained that the very nature of this type of service which most commonly applies to employees operating com-

muter trains necessitates a greater spread because of the morning and evening rush hour traffic. He described this service as one of the "headaches" of the railroad industry in that it is almost invariably unprofitable and because state regulatory bodies have declined to grant rate increases even to the extent of making the service cover out-of-pocket costs.

Mr. Horning showed how the proposed rule change, coupled with any increase in wages, would swell earnings of the men in this service, citing an example of a Long Island engineer whose present monthly earnings are \$485.34, and whose monthly earnings, under the proposed rule change and with a 15½-cent an hour increase, would be increased \$354.60 a month to a total of \$839.94.

#### Government Assails Wartime Rates On Bomb Clusters, Wooden Pallets

The government's attack on the railroads' wartime freight rates continued this week when the Department of Justice filed two more complaints with the Interstate Commerce Commission seeking recovery for alleged overcharges on shipments of various commodities. One complaint, which names 650 railroads as defendants, pertains to the rates charged on aerial bomb cluster adapters, while the other, in which 490 carriers are cited, refers to rates levied on carloads of wooden pallets. As reported in *Railway Age* of February 21, page 67, the government recently assailed the wartime rates on combat vehicles and certain iron and steel products used to build ships.

An appendix to the complaint assailing the rates charged on the bomb cluster adapters, (which the government described as devices used to hold small aerial bombs together and release them from a plane as a unit or separately), set out representative shipments of the clusters which moved under rates ranging from 38 cents to \$3.09 per 100 lb. Had they moved on the basis of rates sought in the complaint, the range would have been from 32 cents to \$2.60 per 100 lb. The rates charged, the government said, did not reflect the deductions, if any, available under land-grant statutes and land-grant equalization agreements.

With respect to the complaint pertaining to wooden pallets, which the government said consisted generally of various pieces of lumber which when assembled formed moveable platforms or sleds on which ammunition, boxes and crates were stacked, the complainant seeks to recover the difference between the rates charged the government and the "substantially lower freight rates" for lumber.

Here again, the government set out representative shipments of the commodities involved. It showed that the rates on pallets ranged from 26 cents to \$1.82 per 100 lb., while the rates on

lumber varied from 16 cents to 88 cents, per 100 lb.

According to J. F. Sonnett, assistant attorney general in charge of the D. of J.'s anti-trust division, both complaints were filed at the request of the armed forces. Meanwhile, as reported in *Railway Age* of January 10, page 68, hearings on four other government complaints assailing the railroads' wartime rates will be held at the Washington, D. C., offices of the Interstate Commerce Commission on April 26.

In another complaint filed with the commission, the government seeks recovery for alleged overcharges by 630 railroads on shipments of blankets during World War II. This complaint, which the Justice Department said also was filed at the request of the armed forces, alleges that the rates charged on carload shipments of blankets exceeded and now exceed those applicable on various other commodities possessing similar transportation characteristics.

The general basis of the complaint is that the government was a shipper in carload quantities, yet it was required to pay rates "established to apply on commercial shipments of blankets which move almost wholly in less-than-carload quantities." The only classification rating available with respect to some of the shipments, it was asserted, was first-class, any quantity, while others moved under commodity rates of 75 per cent of first class. The rates paid on the blankets are assailed as unreasonable to the extent that they exceeded charges which would have been made on the alternative basis of 70 per cent of first class, minimum 18,000, or 50 per cent of first class, minimum 30,000 lb.

#### Davies Elected Vice-President Of Short Line Association

James Davies, president of the Alton & Southern, was elected western regional vice-president of the American Short Line Railroad Association at a February 18 meeting of the association's board of directors in Washington, D. C. He succeeds A. C. Friedsam, former president of the Chicago, West Pullman & Southern, who has become assistant general traffic manager of the International Harvester Company. John W. Barriger, president of the Chicago, Indianapolis & Louisville, was elected to the board.

#### Non-Certified Air Carries Ordered Suspended by C.A.B.

The Civil Aeronautics Board has suspended Letters of Registration held by 11 non-certified irregular air carriers. Action was taken by the C.A.B. following the failure of those lines to file their quarterly operational reports with that agency on or before February 13. As reported in *Railway Age* of February 7, page 64, a total of 39 carriers faced suspension unless they filed the required reports.

In providing for the issuance of Letters of Registration to non-certified carriers, the C.A.B. requires such lines to file quarterly operational reports on or before the twentieth day of every October, January, April and July. The C.A.B. has contended that non-compliance by the irregular carriers with this requirement while continuing to engage in air transportation "seriously impairs and interferes" with the "proper discharge" by the C.A.B. of its duties and functions under the Civil Aeronautics Act.

#### Issues Compilation of Cases On Accident-Reporting Rules

A compilation of cases wherein the Interstate Commerce Commission's accident-reporting rules have been interpreted has been issued by the commission's Bureau of Transport Economics and Statistics. It is a 199-page pamphlet entitled "Cases Relating to Rules Governing Monthly Reports of Railway Accidents (1922 Revision) and Interpretations of Rules Governing Monthly Reports of Railway Accidents (1922 Revision) Issued in 1934."

The latter embodied the latest previous interpretations of the rules, according to the present compilation's foreword by Bureau Director W. H. S. Stevens. He added that the present compilation covers several hundred cases selected because they "seemed best to reflect the reportability or non-reportability of accidents in various categories." The selection involved a study of "over 1,300" cases.

#### Illinois Central Fined \$2,500

The Interstate Commerce Commission has been advised that a fine of \$2,500 was imposed upon the Illinois Central in the federal district court at Chicago on February 11. According to the commission, the carrier entered pleas of nolo contendere to an information in 10 counts charging it with having violated Section 20(7)(b) of the Interstate Commerce Act. The matter involved the making of false entries in records relating to the pick-up of livestock at East Dubuque, Ill., by an employee of the I. C., the commission's statement said.

#### Pullman Asks Increased Rates

C. R. Harding, president of the Pullman Company, announced on February 27 that an application has been filed with the Interstate Commerce Commission for authority to increase Pullman charges on room and seat accommodations throughout the country. The proposed increases cover certain types of room accommodations and seats in sleeping or parlor cars, he stated. The changes requested in room rates are confined to bedrooms, compartments, and drawing rooms. No boost is asked in the rates for such type rooms as duplex single rooms, nor is any increase requested in rates for berth accommodations in either standard or tourist cars.

The type of room accommodations on which the rate increases are asked are in such heavy demand that the present available supply is inadequate, Mr. Harding said. He pointed out that there has been no change in the charges for seat accommodations for six years, despite the increased cost of furnishing that class of service, and added that recent wage increases have made the request for higher rates "unavoidable."

### **Freight Car Loadings**

Carloading figures for the week ended February 28 were not available when this issue went to press.

Loadings of revenue freight for the week ended February 21 totaled 805,376 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

#### **Revenue Freight Car Loading**

For the Week Ended Saturday, February 21			
District	1948	1947	1946
Eastern	152,895	147,752	131,284
Allegany	169,037	163,749	136,617
Pocahontas	69,407	65,328	62,767
Southern	140,286	133,411	137,506
N. Western	83,467	83,439	80,243
Cen. West.	124,567	122,253	115,200
S. Western	65,717	58,757	59,664
Total W. Dist.	273,751	264,449	255,107
Total All Roads	805,376	776,689	723,281
Commodities:			
Grain	35,139	49,050	51,720
Livestock	8,327	12,299	17,242
Coal	192,207	182,420	184,186
Coke	15,259	14,203	8,852
Forest	46,197	46,256	37,650
Ore	15,256	12,636	7,288
Mdse. l.c.l.	113,490	109,926	113,883
Misc.	379,501	349,899	302,460
Feb. 21	805,376	776,689	723,281
Feb. 14	734,262	799,977	707,054
Feb. 7	747,394	767,301	713,240
Jan. 31	727,038	835,051	723,301
Jan. 24	771,992	821,928	708,554
Cumulative total, 8 weeks	6,110,833	6,347,387	5,750,739
Totals for Canada:			

*In Canada*—Carloadings for the week ended February 21 totaled 68,815 cars as compared with 69,951 cars for the previous week and 68,503 cars for the corresponding week last year according to the compilation of the Dominion Bureau of Statistics.

Totals for Canada:

	Revenue Total Cars	Cars Rec'd from	Loaded Connections
February 21, 1948..	68,815	37,985	
February 22, 1947..	68,503	37,241	
Cumulative total for Canada:			
February 21, 1948..	558,232	273,409	
February 22, 1947..	533,685	286,078	

### **Describes Japanese Rail System**

A description of post-war railroad conditions in Japan was presented February 24 before the Washington, D. C., post, Society of American Military Engineers, by Colonel H. G. Hill, United States Army. Colonel Hill currently is assigned to the military construction branch, Office of the Chief of Engineers.

Colonel Hill's address was a synopsis of a report he made to General MacArthur and Secretary of Defense Forrestal following his completion of duties as chief, transportation, economic and scientific section, G.H.Q., Tokyo. Colonel Hill was sent to Tokyo after VJ-

Day to take charge of the rehabilitation program of the Japanese railroads. The program, he said, was subsequently abandoned due to the lack of materials.

### **St. Lawrence Seaway Shelved by Senate**

Passage at the present session of Congress of the resolution to approve the United States-Canada agreement for construction of the proposed St. Lawrence seaway and power project was blocked on February 27 when the Senate voted to send the measure back to its committee on foreign relations for further study. The vote was 57 to 30 on the recommittal motion which was made by Senator Smith, Republican of New Jersey.

Mr. Smith had filed the motion on February 23 in accordance with the unanimous-consent agreement which was entered early last month with respect to a vote on the measure. The agreement provided that a motion to recommit would be in order February 23 and would be voted on February 27, the date also set for a vote on the resolution itself. The latter was precluded by adoption of the recommittal motion.

The resolution is S. J. Res. 111, introduced by the foreign relations committee's chairman, Senator Vandenburg, Republican of Michigan, for himself and a bipartisan group of 15 other senators. It includes provisions purporting to make the seaway and power developments "self-liquidating."

### **Drops Express Rate Probe**

The Interstate Commerce Commission has discontinued its investigation of the proposed express-rate increases which it held up last December when it authorized the Railway Express Agency to file tariffs publishing the 10 per cent increases in first- and second-class rates that became effective January 22. The order discontinuing the investigation was dated February 20; and it was issued after commission consideration of a letter wherein R.E.A. advised the matter could be "better and more expeditiously handled by filing tariffs in the manner provided by section 6 of the Interstate Commerce Act, subject to protest and possible suspension."

The proposals involved would raise by 10 per cent the third-class rates; car-load and l.c.l. commodity rates; rates and charges stated in the money classification; refrigeration charges; C.O.D. service charges; and "all specific minimum charges." These "miscellaneous items," R.E.A. told the commission, "are in no way related to class rates and charges."

### **A.A.R. Advised of Measures To Hike Steel Allocations**

Steps being taken by the Office of Defense Transportation and other government agencies toward increasing the allocation of steel for the manufacture of rails, crossties, rolling stock and other railroad equipment were outlined

by Colonel J. Monroe Johnson, director of the O.D.T., at a February 27 meeting of the board of directors of the Association of American Railroads. The meeting was held at Washington, D. C.

The board also was advised that the steel shortage was a contributing factor toward the output in January of less than 8,000 new freight cars, or more than 2,000 under the monthly goal of 10,000 units. In view of this decrease in production, more efficient use by the railroads of the present freight car supply was urged.

### **Pennsylvania Fined \$225**

The Interstate Commerce Commission has been advised that a fine of \$200 plus \$25 in costs was imposed upon the Pennsylvania in the federal district court at Toledo, Ohio, on February 9. According to the commission, the carrier pleaded *nolo contendere* to an information in two counts charging it with having violated the commission's regulations with respect to the transportation of explosives by improperly placing a car marked "Explosives" in various operations.

### **Amended Railroad Reorganization Measure Approved by Senate**

The House committee on interstate and foreign commerce announced on February 27 that it had approved the Senate version of H.R. 2298, which provides for the voluntary readjustment of railroad financial structures. The bill, sponsored by Representative Wolverton, Republican of New Jersey, passed the Senate on February 26.

As reported in *Railway Age* of February 21, page 65, the bill, in its present form, differs from the version passed by the House last year in that provisions are now included making it applicable to some roads already in the hands of the courts. However, such provisions are much more restrictive than previous proposals along that line, and few, if any, roads undergoing reorganization are expected to take advantage of them. Another change added provisions for the modification of stocks as well as bonds.

### **Representation of Employees**

The Brotherhood of Railroad Trainmen has replaced the Order of Railway Conductors as the representative of road conductors employed by the Texas Mexican, as the result of a recent election which has been certified by the National Mediation Board. The N.M.B. also has certified a local affiliate of the Railway News Service and Sales Employees, American Federation of Labor, to assume the representation of train news agents employed by the Southern Pacific (Pacific Lines). These formerly were not represented by any organization.

Because less than a majority of eligible employees participated and cast valid ballots in the election, the N.M.B. found no basis for certification and therefore dismissed an application of the

United Railroad Workers of America, Congress of Industrial Organizations, which had sought to represent station agents and clerical, office, station and storehouse employees of the Texas Electric. As a result of the board's action, the employees involved remain without representation.

### B. & M. Testing Electro-Motive Branch Line Diesel Locomotive

The Boston & Maine and the Electro-Motive Division of the General Motors Corporation this week began a series of road tests on local freight and passenger trains of an experimental 1,500-hp. Diesel-electric locomotive designed for branch-line service. The locomotive, which has a 16-cylinder engine said to be capable of hauling an 8-car train at 65 miles an hour, will be used on various B. & M. suburban trains for about a week. "We have no plans at this time for purchasing branch-line Diesels," a spokesman for the road said, "but we shall conduct extensive tests to determine where they might fit into our service in the future."

### Choose Site, Push Plans for Chicago RR Show This Summer

A site along Chicago's lake front was assured last week for a proposed railroad show marking the centennial of Chicago as a railroad center—to be known as the Chicago Railroad Fair of 1948—scheduled to be presented in that city from about July 20 to September 6. The Chicago Park District unanimously endorsed the staging of the pageant in Burnham Park, in an eight-block area facing Lake Michigan. A committee was also appointed by the park commissioners for the purpose of negotiating a contract with the non-profit corporation set up by the railroads to run the show. As noted in the *Railway Age* of February 14, page 70, the spectacle would serve to celebrate the entrance into Chicago 100 years ago of the first steam locomotive.

In addition to the park board, the show has been endorsed by Mayor Martin H. Kennelly, the city counsel and the Chicago Association of Commerce and Industry. At present, a railroad committee, headed by R. L. Williams, president of the Chicago & North Western, is soliciting funds from all of the nation's Class I railroads which are expected to participate in the show. The cost of the event has been estimated at \$1,300,000.

Paul M. Massmann, director of exhibits, has announced that some 60,000 sq. ft. of space would be made available for the exhibiting of railroad supply manufacturers' products. A number of 60 ft. by 20 ft. tents would house exhibits on approximately 20,000 sq. ft. of the allotted supply trade exhibition area, the balance of the area remaining uncovered for the display of products which, by reason of size, cannot be placed in tents.

Detailed plans for the show are being

drawn up by Major Lenox R. Lohr, president of the railroads' non-profit corporation, who served as general manager of the 1933 "Century of Progress" exposition. A stage, 250 ft. to 300 ft. long is planned for the dramatization of the story of the "Iron Horse," from its "Tom Thumb" beginning up to the present-day Diesels. A cast of nearly 200 persons is expected to participate in this phase of the show, which could be witnessed by 5,000 persons seated in an open-air theater. Edward Hungerford, railroad author, has been engaged to write the script for the theater show.

It has been emphasized that the entire presentation—including the supply trade exhibits—would be made "popularly interesting" for widespread appeal to the general public. The backers of the show anticipate an attendance of nearly 2,500,000 persons during the six-week period.

### Synthetic Crosstie Patented

E. V. Bulow of Washington, D.C., is one of a group of research engineers who have filed patent applications and formulas from which they say they can produce a crosstie to take the place of the wooden tie. All ingredients are said to be natural products, which, when molded, produce a crosstie with the flexibility of a seasoned white oak tie, in which spikes can be inserted by force without causing fracture, and will not explode, chip, break or crack in normal use. It is reportedly entirely inert, impervious to moisture and will not expand or contract.

### C. D. Crandall Retires

C. D. Crandall, who has been director of the Interstate Commerce Commission's Bureau of Accounts since June, 1941, retired on February 29. He had been connected with the bureau at different times since 1914.

### Four Roads Offer Ticket Delivery Plan in New York

The New York Central, the Pennsylvania, the New York, New Haven & Hartford, and the Leigh Valley resumed in New York on March 1, in cooperation with Western Union, a city ticket delivery service which had been in effect before World War II. Covering all types of tickets in which any of the four roads participates, the service, it is expected, will be extended to other cities if public interest proves sufficient. The service will be offered at Grand Central Terminal by the New York Central and the New Haven; at Pennsylvania Station by the Pennsylvania, the New Haven and the Lehigh Valley; and by all four roads at consolidated ticket offices at 17 John street, 4 West 33rd street and 3 West 47th street in Manhattan and at 155 Pierrepont street, Brooklyn.

Under the plan, after travelers have made their Pullman reservations by telephone in the usual way they may

obtain the necessary railroad and Pullman tickets by telephoning any of these offices. The office will take the order, make out the tickets, and arrange for prompt delivery in a sealed envelope by Western Union in any of the city's five boroughs. The purchaser will give the messenger cash for the tickets, plus a delivery fee of 50 cents or more, varying with the distance of the delivery, which will cover the messenger's trips to the ticket office and to the purchaser's address. Where credit has been established with the ticket office in advance, the purchaser's check will be accepted. Deliveries will be made between 8:30 a.m. and 10 p.m., seven days a week, from Grand Central Terminal or Pennsylvania Station, and from the consolidated ticket offices during their business hours. The plan, it was pointed out, in addition to providing greater convenience for those who use it, will reduce window waiting for those preferring to obtain their travel accommodations personally.

## EQUIPMENT AND SUPPLIES

### FREIGHT CARS

The Wheeling & Lake Erie has ordered 500 70-ton fixed-end gondola cars from the American Car & Foundry Co. An inquiry for 500 50-ton drop-end gondola cars was reported in *Railway Age* of January 24.

The Norfolk & Western has ordered 1,000 70-ton steel hopper cars from its Roanoke, Va., shops at an estimated cost of \$4,250,000. Construction of these cars is expected to begin in October.

The Pacific Fruit Express Company has ordered 3,000 new refrigerator cars from its shops in Los Angeles, Cal., Colton and Roseville. In addition, the company will rebuild 2,500 of its cars this year.

The St. Louis-San Francisco is considering the purchase of 50 65-ft. gondolas.

The Chicago, Rock Island & Pacific has ordered 500 70-ton hoppers from the American Car & Foundry Co., the inquiry for which was reported in the *Railway Age* of January 10.

### LOCOMOTIVES

The Louisville & Nashville has ordered 22 steam locomotives of the 2-8-4 type from the Lima-Hamilton Corporation at an approximate cost of \$5,900,000. In addition, orders have been placed for 39 Diesel-electric locomotives as follows: 5 1,000-hp. switching, 5 1,500-hp. helper and 4 2,000-hp. passenger locomotives costing about \$2,051,000 will be built by the Electro-Motive Division of the General Motors Corporation and 20 660-hp. and 5 1,000-hp. switching

locomotives costing approximately \$1,959,735 will be constructed by the American Locomotive Company. Delivery of the steam locomotives, the inquiry for which was reported in *Railway Age* of February 16, is scheduled for the latter part of this year. The 2-8-4 locomotives will have a tractive effort of 79,390-lb., with booster. The road also has authorized the spending of some \$600,000 for improvements in facilities needed for the operation and maintenance of the new equipment.

The **Minneapolis, St. Paul & Sault Ste. Marie** has ordered four 4,500-hp. Diesel-electric freight locomotives and one 1,000-hp. Diesel-electric switcher from the Electro-Motive Division of the General Motors Corporation. Delivery of the freight locomotives, which are slated for service between the Twin Cities and Chicago, is expected to begin in June. The new switcher will be placed into service at Schiller Park, Ill.

The **Chicago, Rock Island & Pacific** has ordered 59 Diesel-electric locomotives, 34 of which will be built by the American Locomotive Company and the remainder by the Electro-Motive Division of General Motors Corporation. Alco will build the following: 24 1,500-hp. road freights; 5 1,000-hp. switchers; and 5 1,500 hp. road switchers. To be built by Electro-Motive are: 10 4,500-hp. road freights; 10 1,000-hp. switchers and 5 1,500 hp. branch-line locomotives. The authority to purchase a large portion of the aforementioned equipment was reported in the *Railway Age* of February 14, page 72.

#### PASSENGER CARS

The **Atchison, Topeka & Santa Fe** has ordered 18 lightweight baggage, express and mail cars from the American Car & Foundry Co. These cars, in addition to those reported ordered in *Railway Age* of February 21, will be specially designed for use in streamliner service between Chicago and California.

The **Union Pacific** has ordered 50 85-ft. 48-passenger chair cars from the Pullman-Standard Car Manufacturing Company and 50 sleeping cars of the 10 cabin-6 double bedroom type from the Budd Company at a total cost of about \$12,000,000. The chair cars will have aluminum structures with steel underframes and the sleeping cars will be constructed of stainless steel. Delivery is scheduled for the last half of 1949.

#### SIGNALING

The **Delaware, Lackawanna & Western** has placed orders with the Union Switch & Signal Co. for the material required to extend the signaling in the Buffalo, N. Y.—Binghamton territory controlled from the Style-C machine at Buffalo, to include several remote locations at Groveland, Wayland and Elmira. The order includes the necessary additional equipment for the control

machine, as well as field coding units, Style-M-22B electric switch movements, Style-SL-6A electric switch locks, relays, rectifiers and transformers. The control of seven switches, five high signals, nine dwarfs and two electric locks is involved. The construction work will be done by railroad forces.

The **Erie** has placed an order with the Union Switch & Signal Co. covering the necessary materials for the relocation of the Style-C control machine from Stony Point, Pa., to Buchanan Junction. This machine controls the centralized traffic control territory extending from Buchanan Junction, to Amasa, a distance of 20 mi. This order involves additional field coding equipment with low voltage d.c. Style-M-2 electric switch layouts, relays and rectifiers. The installation work will be done by railroad forces.

The **Lakefront Dock & Railroad Terminal Co.**, a subsidiary of the Baltimore & Ohio and the New York Central, has ordered equipment from the General Railway Signal Company for the installation of an all-electric car retarder system at Toledo, Ohio. There will be 6 retarders, totaling 418 ft. of retardation, and 10 power-operated switches. Model-6 electric switch machines and Type-P signals will be used. The construction will be handled by railroad forces.

#### CONSTRUCTION

**Chesapeake & Ohio.**—The Interstate Commerce Commission has denied a petition filed by the Norfolk & Western which sought to have set aside an order of December 31, 1947, in the Finance Docket No. 15665 proceeding, wherein the commission's Division 4 authorized the C.P.O. to construct a \$2,546,600 extension from a point near Holden, W. Va. As reported in *Railway Age* of January 17, page 62, purpose of the extension, which includes a 2,650-ft. tunnel, is to serve a new tipple of the Island Creek Coal Company. The commission's March 1 order also serves to revoke an order issued last month postponing, until further notice, the effective date of its original order in the proceeding (see *Railway Age* of February 14, page 76).

**Denver & Rio Grande Western.**—This road has scheduled various improvement projects to be completed this year at a cost of approximately \$875,000. All of the work will be performed by company forces, except the construction of a new hotel for railroad personnel at Phippsburg, Colo., to cost an estimated \$70,000. The projects, with estimated gross costs in parenthesis, are as follows: Rearrange trackage and install interlocking plant jointly with the Union Pacific

and the Western Pacific at Salt Lake City, Utah (\$265,000); lay new ballast in 25 mi. of track on the Marysville (Utah) branch (\$61,500); change yard tracks at Orestad, Colo. (\$60,000); construct additional yard tracks at Alamosa, Colo. (\$21,500); build rock-slide detector fences at various points (\$49,000); construct yard speaker system at Pueblo, Colo., (\$56,000); install additional telephone carrier channels at Grand Junction, Colo. (\$43,000); remodel power plant in terminal at Grand Junction (\$60,000); construct a one-mile new track to eliminate a sharp curve between Desert, Colo., and Cliff (35,000); install centralized traffic control on six miles of single track between Bragdon, Colo., and Pueblo (\$56,000); install automatic block signals on single track from Lake, Utah, to Roy (\$38,000); and construct two-mi. spur to Hercules Powder Company at Bacchus, Utah (\$60,000).

#### SUPPLY TRADE

##### Vapor Heating Will Honor 38 Long-Time Employees

The Vapor Heating Corporation at Chicago will honor 38 of its employees, whose combined services total more than 1,000 years, at a fellowship meeting to be held about May 1, according to A. D. Bruce, president. The meeting will coincide with the opening of a new section of the company's building, it was stated.

The longest record of service with the company is held by B. A. Keeler, a sales engineer, who has completed 43 years. Records of 38 years' service each are held by the following: Mr. Bruce; E. A. Russell, vice-president and chief engineer; O. A. Rosboro, vice-president; C. J. Scanlon, assistant to the vice-president; G. H. Hertzfeldt, superintendent; and T. J. Manchester, mechanical engineer.

##### Plan Large Supply Exhibition Area at Chicago Railroad Show

Manufacturers of railroad equipment will be allotted some 60,000 sq. ft. of exhibition space at the 100th anniversary railroad show scheduled to be held in Chicago this summer, according to Paul M. Massmann, director of exhibits. Mr. Massmann pointed out that exhibits to be most attractive should be appealing and interesting to the general public. Inquiries for exhibit space should be directed to Mr. Massmann, Chicago Railroad Fair of 1948, care of the Museum of Science and Industry, Chicago 37.

**Sherman S. Watkins**, who served for 15 years as district manager of the wood preserving division of the Koppers Company at Marietta, Ohio, has opened an

office at 102 Front Street in Marietta, for service as a consultant on timber production, management and sales and wood preservation problems.

**William H. Cordes**, manager, market development division of the **American Steel & Wire Co.**, a subsidiary of United States Steel, has been appointed also manager of the advertising division.

**R. Nevin Watt**, formerly general sales manager of the **Baldwin Locomotive Works**, has been elected assistant vice-president, domestic sales and **Raymond B. Crean**, formerly assistant to the vice-president, operations, has been elected assistant vice-president, production. The appointments of **Roland C. Disney**, formerly assistant general sales manager, as mana-



**R. Nevin Watt**

ger of domestic sales and **Robert G. Tabors**, formerly sales manager for the William H. Harman Corporation, as sales manager of the hydraulic press and power tools section of the Eddystone, Pa., works, also were announced.

Mr. Watt joined the Standard Steel Works Company, now a division of Baldwin, in 1913. He was appointed sales manager of Standard Steel in 1930



**Roland C. Disney**

and general sales manager of Baldwin in 1942. Mr. Crean was formerly comptroller and manager of the statistical department of the National Electrical

Manufacturers Association. In 1943 he joined Baldwin as assistant to the comptroller and later was appointed assistant to the vice-president, operations. Mr. Disney worked in the engineering department of the Western Electric Com-



**Raymond B. Crean**

pany for eleven years until 1941 when he entered the United States Army. After his release he joined Baldwin in February, 1946, as eastern district sales manager and, in June, 1947, was appointed assistant general manager of sales. Mr. Tabors was formerly associated with Baldwin from 1937 until he entered the United States Army during the recent war, after which he joined the William H. Harman Corporation.

**Kenneth L. Selby**, formerly engineering assistant of the **National Malleable & Steel Castings Co.**, has been appointed chief engineer of the firm's railway division to succeed the late **Howard W. Gilbert**.



**Kenneth L. Selby**

Before joining National in 1945, Mr. Selby worked for the Pullman Company, the Illinois Central and the Alton. He is a member of the American Society of Mechanical Engineers and the Cleveland Engineering Society.

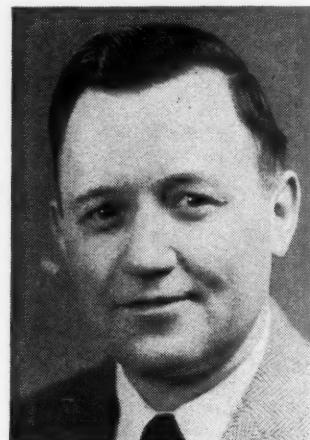
**T. G. Johnson**, a member of the advertising department of the **Okonite Company** for the last two years, has been appointed assistant advertising manager

in charge of advertising and promotional work for the Hazard insulated wire works division, in Wilkes-Barre, Pa.

**John P. Purdy** has been elected president of the **Purdy Company** at Chicago, succeeding **S. E. Purdy**, who has become chairman of the board of directors. **John I. Duffy** has been elected executive vice-president and secretary.

**A. J. Rose** has been appointed vice-president in charge of sales of the **Greenville Steel Car Company**, at Greenville, Pa., to succeed **K. C. Gardner**, who has retired, but who will continue to serve in a consulting capacity.

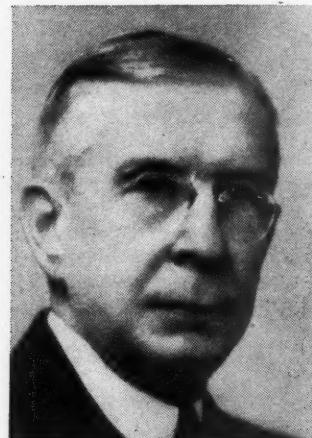
**Karl J. Leary** has been appointed Airfoam representative in the Chicago district for the chemical products division of the **Goodyear Tire & Rubber Co.** Mr.



**Karl J. Leary**

Leary was formerly a representative in Cincinnati, Ohio, for a food manufacturing concern.

**Gilbert F. Close** has been appointed director of public relations of the **General Steel Castings Corporation**, attached to the



**Gilbert F. Close**

staff of president C. P. Whitehead, with offices at Granite City, Ill. Mr. Close has been connected with General Steel Castings since 1920 and worked for many years in the personnel department.

From 1932 to 1940 he was office manager of the district sales department and in the latter year he was appointed director of personnel at the Commonwealth plant, Granite City.

**Edward A. Malling**, whose appointment as sales manager of multi-weave products for the specialty division of the General Electric Company, at Syracuse, N.Y., was announced in *Railway Age* of

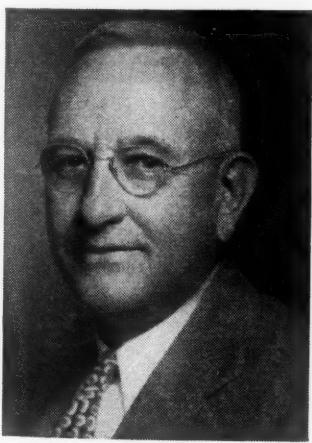


**Edward A. Malling**

February 28, joined the company's electric refrigeration department in Cleveland, Ohio, in 1935. He later worked for the appliance and merchandise department and, in 1942, was transferred to the purchasing section of the electronics department at Bridgeport, Conn. He has been in the electronics department in Syracuse since 1945.

#### OBITUARY

**James L. Lavalle**, manager of the railway traffic and sales department of the Texas Company, New York, whose



**James L. Lavalle**

death on February 12 was reported in the *Railway Age* of February 21, was born in Boerne, Texas, in 1884. He began his railroad career as an apprentice railway machinist, and later worked as master mechanic on the National Railways of Mexico. He subsequently joined the Gulf Coast Lines

and worked successively as master mechanic, assistant superintendent and superintendent of motive power. In November, 1922, he joined the Texas Company as a lubrication engineer and in July, 1928, he was appointed assistant manager of railway sales at Chicago. He was appointed sales manager at New York in October, 1937, and manager of railway traffic and sales department in July, 1939.

**Howard W. Gilbert**, engineering assistant to the president of the National Malleable & Steel Castings Co., at Cleveland, Ohio, died recently.

## ORGANIZATIONS

George F. Ashby, president of the Union Pacific, will address the *Pacific Railway Club* at its 31st annual meeting and banquet at the Palace Hotel in San Francisco, Cal., on March 11. Mr. Ashby will also be inducted as an honorary member of the club. The following newly elected officers will be installed at the meeting: President, Roland D. Pierson, regional engineer of the Atchinson, Topeka & Santa Fe at Los Angeles, Cal.; vice-presidents, Herbert I. Benjamin, chairman of the system insurance committee of the Southern Pacific at San Francisco; D. F. Wengert, superintendent of the U. P. at Los Angeles; and J. M. Souby, Jr., commerce attorney of the Santa Fe at San Francisco; and treasurer, W. C. Mittelberg, general freight agent of the Western Pacific at San Francisco.

The Chicago Chapter, *Railway & Locomotive Historical Society* will hold its next meeting on March 12 at the Western Society of Engineers, 205 W. Wacker drive, Chicago. George Lenherer, assistant to general superintendent of equipment, Illinois Central, will present a talk entitled "Improvements in Coal-Burning Locomotives on the Illinois Central." In addition, a new sound-color film, entitled "Suggestions Unlimited," recently produced by the railroad to commemorate the tenth anniversary of its suggestion system, will be shown.

The Northern Indiana Chapter of the *Railway & Locomotive Historical Society*, will hold its March 9 meeting at 6:30 p.m. in the banquet room of the Mishawaka Hotel, 206 South Main Street in Mishawaka, Ind., and not in the union station at South Bend, Ind., as was erroneously reported in the *Railway Age* of February 21.

At the annual meeting of the *Philadelphia Passenger Association*, the following officers were elected to serve for the ensuing year: President—L. J. McKernan, city passenger agent, Union Pacific; vice-presidents—E. B. Saltner,

Baltimore & Ohio and A. E. Rohmer, Great Northern; secretary—J. J. Collins, Burlington; and treasurer—W. L. Huntsinger, Pennsylvania.

At the 26th annual meeting of the *Miami Valley Traffic Club*, Dayton, Ohio, T. G. Allison, traffic manager, Dayton Rubber Manufacturing Company was elected president.

Clyde F. Farmer, vice president of traffic, Delaware, Lackawanna & Western, was elected president of the *National Freight Traffic Association* at the annual dinner meeting on February 20 at the Biltmore hotel, New York. The spring meeting of the association will take place at the Greenbrier hotel, White Sulphur Springs, W. Va., May 10-12, inclusive.

The *Central Railway Club of Buffalo* will meet March 11 in the ballroom of the Hotel Statler, Buffalo, N. Y., at 8 p.m. Representatives of the railroads and shippers advisory boards will hold a round table discussion on the perfect shipping campaign.

The next meeting of the *Eastern Car Foremen's Association* has been scheduled for March 12 at the Engineering Societies Building, 29 West 39th streets, New York, at 8 p.m. Speakers will be Jan S. Irvine, sales manager of transportation, Owens-Corning Fiberglas Corporation; William Enright, manager railroad sales, Owens-Corning Fiberglas Corporation; and Vincent T. Botting, sales representatives, Gustin-Bacon Manufacturing Company, who will discuss the various uses of Fiberglas products as related to the railroads' needs.

A meeting of the *Northwest Locomotive Association* will be held on March 15 at 8 p.m., at Woodruff Hall, St. Paul, Minn. A paper entitled "Shop Tools" will be presented by Walter R. Hammond.

A meeting of the *Western Railway Club* is scheduled for March 15 at 6 p.m., at the Hotel Sherman, Chicago. Colonel Jack Major will be the guest speaker.

W. G. Vollmer, president of the Texas & Pacific, will address the next meeting of the *Car Department Association of St. Louis* to be held at the Hotel DeSoto, St. Louis, Mo., on March 16 at 8 p.m. Mr. Vollmer's subject will be "The Evil of Subsidies."

William C. MacMillen, Jr., president of the Federation for Railway Progress, will address the *Western Society of Engineers* on March 16 at the society's headquarters, 205 West Wacker drive, Chicago. His topic, "Clear the Track for Progress," will cover the creation and development of the federation.

The *Pacific Coast Transportation Advisory Board* will hold its 75th regular meeting in Los Angeles, Cal., on March 17 and 18, at the Biltmore hotel. Colonel J.

Monroe Johnson, director of the Office of Defense Transportation will address the board's luncheon session. The rest of the program will be devoted to committee reports and a report on the national transportation conditions by W. C. Kendall, chairman, Car Service Division, Association of American Division, Association of American Railroads. Following the meeting there will be the annual election of officers.

The next meeting of the **Car Foremen's Association of Omaha** will be held at the Y.M.C.A., Council Bluffs, Ia., on March 18 at 6:30 p.m.

The **Southern and Southwestern Railway Club** will meet March 18, at 10:00 a.m., at the Rainbow Roof of the Ansley Hotel, Atlanta, Ga. A paper on air conditioning will be presented by H. H. Hanft, transportation engineer, Industry Engineering Department, Westinghouse Electric Company, and E. S. Smith, master car builder, Florida East Coast.

A meeting of the **Transportation Club of the Rochester Chamber of Commerce** has been scheduled for March 22, 7:30 p.m., in the Chamber of Commerce, Rochester, N. Y.

The 25th annual meeting of the **Great Lakes Shippers Advisory Board** will be held at the Hotel Commodore Perry, Toledo, Ohio, March 23 and 24.

## CAR SERVICE

I. C. C. Service Order No. 87, which modifies the free time allowed on tide-water coal and coal products at North Atlantic ports, has been further amended to provide that excess debits accrued in the settlement period ended March 1 may be offset by credits earned in the settlement period ended May 1. The amendment was No. 12, and the relief was granted because of weather conditions which interfered with the unloading of cars during the past settlement period.

I. C. C. Service Order No. 620 (revised), which prohibits light-weighting at the ports of cars furnished for loading with import freight, has been modified by Amendment No. 5 which set back the expiration date from February 29 until August 10.

I. C. C. Service Order No. 768, which fixes a maximum of five days free time on box cars loaded with freight transhipped from vessels and further provided within 24 hours after receipt of forwarding directions, has been modified by Amendment No. 1 which set back the expiration date from March 1 until September 1.

I. C. C. Service Order No. 798, which makes loaded private tank cars on private tracks subject to demurrage rules, has been modified by Amendment No. 6 which set back the expiration date from March 1 until April 1.

## FINANCIAL

**Denver & Rio Grande Western.** — *Initial Dividend.* — This company has declared an initial dividend of \$1 a share on the common stock, payable on March 15 to stockholders of record on March 5.

**Akron, Canton & Youngstown.** — *Extra Dividend.* — This company has declared an extra dividend of 50 cents a share on the common stock, payable on April 1 to stockholders of record on March 15.

**Norfolk Southern.** — *Dividend.* — This company has declared a dividend of 50 cents a share on the common stock, payable on March 15 to stockholders of record on March 1. The previous payment was \$1 a share on June 14, 1945.

**Union Pacific.** — *Dividend.* — This company has declared a dividend of \$2.50 a share on the common stock, payable on April 1 to stockholders of record on March 8. The previous payment was \$5.50 a share on January 2.

**Delaware, Lackawanna & Western — Dividend.** — This company has declared a dividend of 25 cents a share on the capital stock, payable on April 1 to stockholders of record on March 11. The previous payment was \$4 a share in 1931. William White, president of the D. L. & W., in announcing the dividend said that in view of the earnings for 1947 and the current situation of the company it was the judgment of the board of directors that a dividend should be paid but that stockholders should not expect payment of any further dividend this year. Mr. White pointed out that sinking fund obligations incurred in connection with the merger of leased lines not only required that 60 per cent of available net income, after certain deductions, must be applied to a sinking fund but also that an additional amount equal to dividends paid on the capital stock must be deposited in the sinking fund. Because of this, he said, the cash cost to the company of the dividend is 50 cents a share. Mr. White added that contingent interest due May 1 on various of the road's bonds will be paid.

**Wisconsin Central — To Pay Bond Interest.** — The federal district court at Minneapolis, Minn., has directed the trustee of this road to pay overdue interest amounting to some \$2,000,000 on its first general mortgage bonds, which are due on July 1, 1949. The interest is payable on March 17, it was stated.

**Southern Pacific.** — *Bonds.* — A joint application filed with the Interstate Commerce Commission by the Southern Pacific Company and its subsidiary, the Central Pacific, seeks authority for the latter to issue \$37,396,000 of first mortgage bonds, series B, for which the S. P. Company seeks authority to assume liability as guarantor. The proceeds of the issue would be used, with other funds, to redeem \$37,524,500 of first

and refunding mortgage, 4 per cent bonds which are due August 1, 1949. The proposed new bonds would be dated February 1, and would mature February 1, 1968. The indenture would include sinking-fund provisions and a redemption-price formula used by the S. P. in other recent financing, the redemption prices to be computed after fixing of the price at which the bonds would be offered to the public. The issue would be sold on the basis of competitive bids, with the interest rate named in such bids.

**Missouri Pacific.** — *Equipment Trust Certificates.* — This road has applied to the Interstate Commerce Commission for authority to assume liability for \$4,330,000 of equipment trust certificates to be issued in connection with the financing of new equipment purchases in the total amount of \$5,784,030. The locomotives are being built by the American Locomotive Company, and the passenger cars by the American Car & Foundry Co. The equipment to be acquired, and the estimated unit costs, are as follows:

Description	Estimated Unit Cost
10 4,500-hp. Diesel-electric freight locomotives, each to consist of 2 1,500-hp. "A" units and 1 1,500-hp. "B" unit .....	\$436,993
3 streamlined mail and baggage cars .....	60,000
1 streamlined baggage - dormitory car .....	55,900
2 streamlined dormitory coaches .....	85,600
5 streamlined divided coaches .....	90,100
1 streamlined diner .....	121,300
3 streamlined diner-lounge cars .....	114,500
1 streamlined undivided coach .....	90,200

The certificates would be dated March 1, and would mature in 10 annual installments of \$433,000 each, beginning March 1, 1949. They would be sold on the basis of competitive bids with the dividend rate named in such bids.

**New York, Chicago & St. Louis.** — *Equipment Trust Certificates.* — Division 4 of the Interstate Commerce Commission has authorized this road to assume liability for \$1,400,000 of 2½ per cent equipment trust certificates, the proceeds of which will be applied toward the cost of 400 50-ton all steel box cars, at an estimated unit price of \$4,436. The cars will be acquired from the Pullman-Standard Car Manufacturing Company. The certificates will be dated March 1 and will mature in 10 annual installments of \$140,000, starting March 1, 1949. The report also approves a selling price of 99.256, the bid of Halsey, Stuart & Co., on which basis the average annual cost will be approximately 2.27 per cent.

**Chicago, Burlington & Quincy.** — *Equipment Trust Certificates.* — This road has applied to the Interstate Commerce Commission for authority to assume liability for \$7,230,000 of equipment trust certificates, the proceeds of which will be applied toward the purchase of 15 6,000-hp. Diesel-electric freight locomotives, at an estimated unit cost of \$612,000, and one 4,500-hp. Diesel-electric freight

locomotive, at an estimated cost of \$470,000. The equipment will be acquired from the Electro-Motive Division of the General Motors Corporation. The certificates, to be sold on the basis of competitive bidding, would be dated April 1.

**New York Central.—Equipment Trust Certificates.**—This road has applied to the Interstate Commerce Commission for authority to assume liability for \$12,600,000 of equipment trust certificates, the proceeds of which will be applied toward the purchase of the following equipment:

	Description and Builder	Estimated Unit Price
2,000	55-ton steel hopper cars (Despatch Shops, Inc.)	\$3,500
10	2,000-hp. Diesel-electric transfer locomotives (Fairbanks Morse & Co.)	189,200
2	low-alloy steel double bedroom lounge-observation sleeping cars (Pullman-Standard Car Manufacturing Co.)	103,582
11	Stainless steel double-bedroom bar-lounge sleeping cars (Budd Co.)	131,000
40	Stainless steel single and double bedroom sleeping cars (Budd Co.)	122,000
20	low-alloy steel single and double bedroom sleeping cars (Pullman-Standard).	99,361

The certificates, to be dated March 15, would be sold on the basis of competitive bidding and would mature in 10 annual installments of \$1,260,000, starting March 15, 1949. The equipment is estimated to cost \$17,407,384.

**Atchison, Topeka & Santa Fe.—Dividend.**—This road has declared a dividend of \$1.50 per share on its common stock payable June 2, 1948, to stockholders of record at the close of business May 6, 1948.

**Denver & Rio Grande Western.—Equipment Trust Certificates.**—This road has applied to the Interstate Commerce Commission for authority to assume liability for \$4,530,000 of series M equipment trust certificates, the proceeds of which will be applied towards the purchase of the following equipment:

	Description and Builder	Estimated Unit Cost
3	6,000 H. P. Diesel-electric locomotives (Electro-Motive Division, General Motors Corp.)	\$630,471
15	7,000 gal. 50-ton tank cars (General American Transportation Corp.)	4,505
50	70-ton mill-type gondolas (Pressed Steel Car Corp.)	5,453
500	50-ton drop-bottom gondolas (Pressed Steel Car Corp.)	5,208
250	70-ton flat-bottom gondolas (Pullman - Standard Car Manufacturing Co.)	5,221

The certificates would be dated May 1 and would be sold on the basis of competitive bidding.

**Chesapeake & Ohio.—Equipment Trust Certificates.**—This road has requested bids for the purchase of \$4,750,000 of serial equipment trust certificates, proceeds from the sale of which will be applied to the purchase of 46 passenger cars for the daylight streamliners, the "Chessies." The total cost of the new equipment is estimated at \$6,000,000. To be dated March 15, 1948, the pro-

posed certificates will mature serially in equal annual installments from March 15, 1949, to March 15, 1958, inclusive. Bidders are asked to specify a dividend rate which must be some multiple of one-eighth of one per cent and must be the same for all maturities. No bid for less than 99 per cent of par, plus accrued dividends from next March 15 to the date of delivery, will be considered.

**Southern Pacific—Central Pacific Bond Retirement.**—The board of directors of the Southern Pacific have approved a program whereby the Central Pacific (part of the S. P.) would issue \$37,396,000 of the new first mortgage bonds and employ the proceeds therefrom, together with other funds, to redeem \$37,524,500 of first-refunding mortgage gold 4 per cent bonds, due August 1, 1949. The new bonds, which would mature February 1, 1968, would be sold at competitive bidding. The S. P. would guarantee the proposed new issue.

**Tennessee Central.—Equipment Trust Certificates.**—This road has asked the Interstate Commerce Commission to approve a sale by it to the Reconstruction Finance Corporation of \$314,000 of Series E 3 per cent equipment trust certificate, the proceeds of which would be applied toward the purchase of 100 50-ton all-steel hopper cars at an estimated cost of \$349,000. The cars would be acquired from the American Car & Foundry Co. According to the applicant, it has been unable to sell the certificates or obtain funds on reasonable terms through banking channels or from the general public. The certificates would be dated April 1 and mature in 20 semi-annual installments, starting October 1.

**Erie.—Control of Rochester & Genesee Valley.**—This company has applied to the Interstate Commerce Commission for authority to acquire, through the purchase of additional stock, control of the Rochester & Genesee Valley. The latter road, which extends approximately 18.2 miles from Rochester, N. Y., to Avon, has been operated under lease by the Erie since 1871. According to the applicant, the authorized capital stock of the R. & G. V. is 8,000 shares, par value \$100 per share, of which 5,552 shares are now outstanding, including 2,604 shares owned by the Erie. The lessee also advised the commission that it has purchased an additional 947 shares since January 1 at approximately \$82 per share.

### Dividends Declared

**Akron, Canton & Youngstown.**—common, 50¢, semi-annually, payable April 1 to holders of record March 15; 5% preferred, \$2.50, semi-annually, payable April 1 to holders of record March 15; extra, 50¢, payable April 1 to holders of record March 15; 5% preferred, \$2.50, semi-annually, payable October 1 to holders of record September 15.

**Alabama & Vicksburg.**—\$3.00, semi-annually, payable April 1 to holders of record March 8.

**Atchison, Topeka & Santa Fe.**—\$1.50, payable June 2 to holders of record May 6.

**Bangor & Aroostock.**—\$5.00 convertible preferred, \$1.25, quarterly, payable April 1 to holders of record March 9.

**Beech Creek.**—50¢, quarterly, payable April 1 to holders of record March 5.

**Chesapeake & Ohio.**—common, 75¢, quarterly, payable April 1 to holders of record March 8; 3 1/2 % convertible preferred 87 1/2 ¢, quarterly, payable May 1 to holders of record April 8.

**Delaware, Lackawanna & Western.**—resumed, 25¢, payable April 1 to holders of record March 11.

**Denver & Rio Grande Western.**—common (initial), \$1.00; 5% preferred, \$5.00, payable March 15 to holders of record March 5.

**Norfolk Southern.**—resumed, 50¢, payable March 15 to holders of record March 1.

**Pittsburgh, Fort Wayne & Chicago.**—common, \$1.75, quarterly, payable April 1 to holders of record March 10; 7% preferred, \$1.75, quarterly, payable April 6 to holders of record March 10.

**Reading.**—4 1/2 % 2nd preferred, 50¢, quarterly, payable April 8 to holders of record March 18.

**Union Pacific.**—common (increased), \$2.50; 4% preferred, \$2.00, semi-annually, both payable April 1 to holders of record March 8.

**Vicksburg, Shreveport & Pacific.**—common, \$2.50, semi-annually; 5% preferred, \$2.50, semi-annually, both payable April 1 to holders of record March 8.

**Wheeling & Lake Erie.**—5 1/2 % convertible preferred, payable May 1.

### Average Prices Stocks and Bonds

	Last Mar. 2	Last week	Last year
Average price of 20 representative railway stocks .....	46.77	46.67	50.38
Average price of 20 representative railway bonds .....	86.34	85.76	91.49

## ABANDONMENTS

**Minneapolis & St. Louis.**—Division 4 of the Interstate Commerce Commission has authorized this road to abandon a branch line extending from Corwith, Iowa, to St. Benedict, approximately 7.2 miles.

**Hoboken Manufacturers.**—Division 4 of the Interstate Commerce Commission has dismissed the Finance Docket No. 15504 application, wherein the Hoboken Railroad, Warehouse & Steamship Connecting sought a certificate stipulating that public convenience and necessity permitted the abandonment of operation of its lines in Hoboken, N. J., and Weehawken by the Hoboken Manufacturers. A January 30 letter to the commission from the lessor said that because a petition for the reorganization of the H. M. has been withdrawn from both the commission and courts, it does not desire to proceed with the abandonment application.

**Illinois Central.**—Division 4 of the Interstate Commerce Commission has authorized this road to abandon a 3.6 mile stub-end line in Hardin county, Ill. The line, which connects with the I. C.'s so-called Colconda District branch, formerly served a fluorspar mine and other small mines which, the division's report said, now ship by truck. The report imposed the usual employee-protection conditions.

**Mobile & Gulf.**—Division 4 of the Interstate Commerce Commission has authorized this road to abandon that

portion of its line between Fayette, Ala., and Brownsville, approximately 23 miles. The commission's report stated that the segment extends largely through swamp lands and that portions of the track are frequently inundated by waters overflowing from the Sipsey river. The roadbed, ties and trestles have deteriorated to such an extent, it said, that continued operation would require almost complete rehabilitation. Only one train weekly has been operated over the segment since October, 1944. The commission also noted that buses operate daily over a highway running parallel to the line. Although no common carrier truck service is operated in the tributary territory, it added, practically all transportation business is handled by privately owned trucks.

**Union Pacific.**—Division 4 of the Interstate Commerce Commission has authorized the abandonment of operation by this road and the abandonment by its lessor, the Los Angeles & Salt Lake, of a portion of the latter's so-called Crestmore branch, extending approximately 2 miles from Riverside, Calif., across the Santa Ana river, to a point in Riverside county.

## RAILWAY OFFICERS

### EXECUTIVE

**B. S. Sines**, whose promotion to executive representative of the Southern Pacific at San Francisco, Cal., was reported in *Railway Age* of February 14, received a degree in civil engineering at Cornell University and entered the serv-



B. S. Sines

ive of the S. P. in 1925 as an instrumentman on the company's lines in the southwest. He was advanced later to assistant engineer, and in 1933 he went to the road's general office at San Francisco, where he subsequently became an executive assistant in the president's office. He became trainmaster on the Sacramento division in 1944 and assis-

tant superintendent on the Tuscon division later the same year. He was promoted in 1946 to superintendent of the Salt Lake division, which position he held at the time of his recent appointment.

**A. J. Van Dercreek**, whose promotion to assistant vice-president in charge of personnel of the Union Pacific at Omaha, Neb., was reported in *Railway Age* of January 31, first became employed by the road in 1909. He served as a clerk in various departments of the road until 1917, when he entered



A. J. Van Dercreek

military service during World War I. Mr. Van Dercreek returned to the U. P. in 1919, and was appointed chief clerk in 1923, chief clerk in the wage bureau in 1928 and supervisor of wage schedules in 1936. He became personnel assistant to vice-president in 1941, the post he held at the time of his recent advancement.

**L. C. Anderson**, manager of passenger transportation of the New York Central system, has been appointed assistant to vice-president, with headquarters as before at New York. Mr. Anderson was



L. C. Anderson

born at Youngstown, Ohio, and entered the service of the New York Central in 1899 as a stenographer in the superintendent's office at Youngstown. He

transferred to Cleveland, Ohio, in 1901 and entered the passenger transportation office there in 1909. He was promoted to superintendent of passenger transportation at Cleveland in 1918 and to assistant general superintendent at New York in 1920. Mr. Anderson was appointed general superintendent in 1929 and manager of passenger transportation in 1941, holding the latter position until his recent appointment as assistant to vice-president.

**R. Wright Armstrong**, executive assistant of the Fort Worth & Denver City (part of the Burlington Lines), with headquarters at Houston, Tex., has been elected vice-president of the road, with headquarters at Fort Worth, Tex., succeeding **C. D. Peckenpaugh**, who has retired as vice-president and general manager.

### FINANCIAL, LEGAL and ACCOUNTING

**W. R. Hovious**, assistant general claim agent of the Illinois Central at Chicago, has been appointed general claim agent at Jackson, Miss., succeeding **Kenneth C. Sawin**, who has retired. Mr. Hovious is succeeded by **B. E. Breitzke**, office manager in the office of the chief claim agent at Chicago.

**Harvey S. Drumheller**, whose appointment as secretary and assistant treasurer of the Lehigh & New England at Bethlehem, Pa., was reported in *Railway Age* of February 14, was born on August 20, 1895, at Bangor, Pa. Mr. Drumheller was graduated from Ban-



Harvey S. Drumheller

gor high school and Easton (Pa.) Business College, entering railroad service on February 1, 1914, as stenographer to the master mechanic of the Lehigh & New England at Pen Argyl (Pa.) shops. He then held various positions in the mechanical, transportation, operating and executive departments, including clerk in the trainmaster's office at Pen Argyl, chief clerk to master mechanic at Pen Argyl, chief clerk to superintendent at Bethlehem, chief clerk to general superintendent, chief clerk to vice-president and gen-



*it's as simple as this:*

## MORE *with* FEWER

Last year, while some 2000 steam locomotives were being retired, the revenue ton-miles moved by steam reached 570 billion.

Here are two apparently opposing facts: The number of steam locomotives on Class I railroads hit a 30-year low. The number of ton-miles moved by these locomotives, on these roads, hit a peace-time high. Obviously the remaining locomotives averaged more time on the road. And, also obviously, the modern portion of that power—both new and rebuilt—raised that average.

It's as simple as that.

We built a substantial number of the modern locomotives that helped set that record. They have proved their ability, with planned scheduling, to stay on the road for 16 and 18 hours at a stretch—and to be ready for reassignment, with planned servicing facilities, in an hour or two. We are continuing to build such locomotives—progressively better, more reliable, and with even greater capacity for work.



**DIVISIONS:** Lima, Ohio — Lima Locomotive Works Division; Lima Shovel and Crane Division. Hamilton, Ohio — Hooven, Owens, Rentschler Co.; Niles Tool Works Co.

**PRINCIPAL PRODUCTS:** Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

eral manager, and chief clerk to executive vice-president and general manager. Mr. Drumheller was chief clerk to the president at the time of his recent election as secretary and assistant treasurer.

**William L. Linnehan**, whose election as assistant general auditor of the reorganized Chicago, Rock Island & Pacific, at Chicago, was reported in *Railway Age* of January 10, was born on June 6, 1881, at Lemont, Ill., and received his higher education at several business col-



William L. Linnehan

leges and at the Watton School of Accounting. Mr. Linnehan began his service with the Rock Island in 1902 as a stenographer in the transportation department, and later held various positions in that department and in the car service and car accounting departments. He was advanced to assistant car accountant in 1918 and to assistant auditor of car service accounts in 1923. In 1932 he became auditor of car service accounts and in 1935 was further promoted to auditor of car service and station accounts. In the following year, Mr. Linnehan was elected assistant general auditor, which position he held with the old company until his election to that post for the reorganized company on January 5.

**Walter Ray Gibbons**, whose retirement as real estate and tax agent of the Cleveland, Cincinnati, Chicago & St. Louis (part of the New York Central) at Cincinnati, Ohio, was reported in *Railway Age* of February 14, was born in Indianapolis, Ind., on January 30, 1879. He received his higher education at the Rose Polytechnic Institute at Terre Haute, Ind., having been awarded a degree in civil engineering in 1901. Mr. Gibbons' first employment was with a bridge engineering firm at Kansas City, Mo., and in 1905 he entered the service of the Big Four in its construction department at Mattoon, Ill. He became chief draftsman in the office of the chief engineer at Cincinnati in 1907, and two years later was appointed engineer for the land and tax department. He was appointed as-

sistant real estate agent in 1910 and real estate agent in 1913. Mr. Gibbons was further advanced in 1917 to real estate agent in 1913. Mr. Gibbons was further advanced in 1917 to real estate and tax agent, the position he held at the time of his retirement.

**Ward Vanderpool**, secretary and assistant treasurer of the Chicago, Rock Island & Pacific, at Chicago, has retired after 45 years of service with the road. A photo of Mr. Vanderpool and a sketch of his career appeared in *Railway Age* of February 7, in connection with his election as secretary and assistant treasurer.

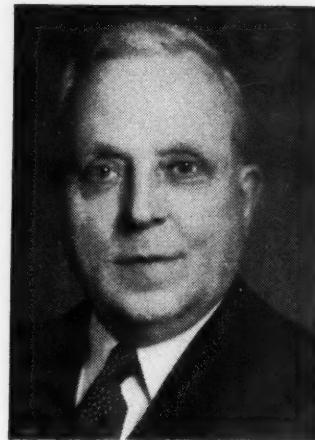
## TRAFFIC

**C. E. Jefferson**, freight traffic manager of the Canadian Pacific, has been appointed general traffic manager, with headquarters as before at Montreal, Que., having jurisdiction over all traffic matters, freight, passenger and steamship of the whole system, including the United States. The duties of system freight traffic manager have been divided two ways to further improve service to the public—**H. W. Gillis**, assistant freight traffic manager, Western lines, at Winnipeg, Man., has been appointed freight traffic manager at Montreal, having charge of setting of rates for all traffic, including the divisions of revenue necessary on long hauls shared with other carriers; **Gerold Hiam**, assistant freight traffic manager in charge of sales and service, having supervision over solicitation and handling of freight. **G. F. Buckingham**, general freight agent at Montreal, has been appointed freight traffic manager at Winnipeg, having supervision over the Prairie and Pacific regions in Canada and the United States Pacific Coast agencies. **Aitken Walker**, general freight agent at Toronto, Ont., has been appointed assistant freight traffic manager, with the same headquarters in charge of the Ontario and Algoma districts.

**John W. Fullerton**, assistant general freight agent at Toronto, has been appointed assistant freight traffic manager at Montreal handling the Quebec and New Brunswick districts in Canada and the agencies East of Pittsburgh and Buffalo in the United States. **Harry Arkle**, general freight agent at Winnipeg, has been appointed assistant freight traffic manager, with the same headquarters, in charge of the Prairie and Pacific regions. **Kenneth M. Fetterly**, general foreign agent at Vancouver, B. C., has been appointed assistant freight traffic manager, with the same headquarters, in charge of the Pacific region. Mr. Arkle and Mr. Fetterly will have control of Pacific Coast agencies in the United States.

Mr. Jefferson was born at Boston, Mass., on September 6, 1889, and entered railroad service on September 10, 1906, as office boy with Canadian Pacific Despatch at Boston, serving suc-

cessively until November, 1911, as billing, tracing, and tariff and percentage clerk. From November, 1911, to March, 1913, he served as tariff clerk for the Boston & Maine, the Maine Central and the New York, New Haven &



C. E. Jefferson

Hartford at Boston. Mr. Jefferson went with the Canadian Pacific in March, 1913, as percentage clerk at Montreal, becoming assistant general freight agent there in December, 1915. He was acting general freight agent, Eastern lines at Montreal from June to December, 1921, then becoming general freight agent, Western lines, at Winnipeg. In July, 1927, Mr. Jefferson was appointed assistant freight traffic manager at Winnipeg, becoming freight traffic manager at Montreal in July, 1930.

Mr. Gillis was born at Richmond, Que., on December 7, 1889, and entered railroad service on May 15, 1905, as call boy for the Canadian Pacific at Mile End, Que. He then served as mes-



H. W. Gillis

senger, assistant biller, junior clerk, clerk, tracing clerk, routine clerk and rate clerk in the general freight office and assistant chief clerk and chief clerk in the foreign traffic manager's office. Mr. Gillis was appointed assistant foreign freight agent at Montreal in 1919 and assistant general agent in

There's no revenue from the coal a railroad hauls to run its own locomotives, and operating efficiency demands that every possible pound of steam be secured from such coal.

A first step toward getting maximum value from each ton of fuel is the maintenance of a 100% brick arch in the firebox of every locomotive.

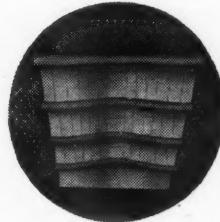
For this purpose the power-increasing, fuel-saving advantages of Security Sectional Arches have been proved by years of service in all types of locomotive fireboxes.

# TO HOLD DOWN "DEADHEAD" COAL



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**HARBISON-WALKER  
REFRACTORIES CO.**  
*Refractories Specialists*



**AMERICAN ARCH CO. INC.**  
60 East 42nd Street, New York 17, N. Y.  
*Locomotive Combustion Specialists*

February, 1922. He became assistant freight traffic manager at Montreal in September, 1926, being transferred to Winnipeg on June 1, 1930.

Mr. Hiam was born at Montreal on December 14, 1888, and entered rail-



Gerald Hiam

road service in June, 1904, in the freight traffic department of the Canadian Pacific at Montreal. From April, 1907, to January, 1908, he was with the Canadian Northern (now Canadian National) in the engineering department at Montreal, then serving for five months in the general manager's office of the Cuba Railroad at Camaguey, Cuba. In July, 1908, he returned to the Canadian Northern in the superintendent's office at Toronto. Mr. Hiam went with the Canadian Pacific in September, 1908, in the freight traffic department at Montreal, becoming traveling freight agent at Toronto in January, 1914, and district freight agent at Fort William, Ont., six months later. He was in active service with the Canadian Expeditionary Forces from June, 1915, to February, 1919,

in December, 1928; and assistant freight traffic manager at Montreal in June, 1930.

Mr. Buckingham was born at Montreal and has been in the service of the Canadian Pacific for 41 years. His appointment to Winnipeg takes him away from Montreal for the first time.

Mr. Walker was born at Glasgow, Scotland, on August 23, 1885. He attended elementary and high school and



Aitken Walker

business college in Glasgow and took a course in railway law at Glasgow Atheneum. He entered railroad service on October 3, 1898, as junior clerk with the Glasgow Barrhead & Kilmarnock Junction railway, serving until April,



John W. Fullerton

1904, in various clerical positions in the passenger traffic department. From May, 1904, to April, 1911, Mr. Walker served as clerk and in various clerical positions in the office of the superintendent of the Glasgow & South Western. He entered the service of the Canadian Pacific on May 8, 1911, as clerk in the office of the auditor of stores and mechanical accounts at Winnipeg. After serving in various other capacities Mr. Walker became assistant general freight agent on September 1, 1926. He was appointed general freight agent at Montreal on June 1, 1930; be-



G. F. Buckingham

to February, 1919, returning to the C.P.R. in March, 1919, as district freight agent at Cleveland, Ohio. He became division freight agent at St. John, N.B., in September, 1926; assistant general freight agent at Montreal

ing transferred to Toronto on January 1, 1934.

Mr. Fullerton was born at Quebec, Que., and worked with the Grand Trunk at Quebec and Toronto from 1912 until he joined the Canadian Pacific in 1918. He was district passenger agent of the C.P.R. at Hamilton, Ont., for seven years before he became assistant general freight agent at Toronto in 1945.

Mr. Arkle was born at Gateshead-on-Tyne, England, and served overseas in World War I with the 29th Battalion, Canadian Expeditionary Forces.



Harry Arkle

He has spent his entire career with the Canadian Pacific at Winnipeg, where he started as a clerk in 1912. He was division freight agent from 1943 until his appointment as general freight agent in 1946.

Mr. Fetterly was born at Toronto and entered the service of the Canadian Pacific in 1914. He worked with the Oriental organization of the C.P.R. at Hong Kong, Kobe, Tientsin, Pekin



Kenneth M. Fetterly

and Shanghai between 1916 and 1940, serving with the Royal Flying Corps in 1918 and 1919. In 1940 Mr. Fetterly became foreign freight agent at Vancouver, B. C., and in 1947, he was appointed general foreign freight agent there.



# PRIME MOVER

**T**HE far-from-groggy steam locomotive, still bearing 80 per cent of the motive power assignment, is receiving a sober revaluation concerning its place in America's railroad future. Neither condolences nor nostalgic reminiscing are in order for the prime mover possessing the incalculable advantage of using the one fuel with well-nigh inexhaustible reserves.

Steam locomotives will be in there, punching, for a long time . . . helped, of course, by Hunt-Spiller valve and cylinder bushings and other vital parts. The use of HSGI has been standard on most American roads for 35 years or more.



## HUNT-SPILLER MFG. CORPORATION

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E. J. FULLER, Vice-Pres. & Gen. Mgr.

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Crosshead Shoes  
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Shoes and Wedges  
Floating Rod Bushings  
Light Weight Valves  
Cylinder Liners and Pistons  
for Diesel Service

Dunbar Sectional Type Packing  
Duplex Sectional Type Packing  
for Cylinders and Valves  
(Duplex Springs for Above  
Sectional Packing)  
Cylinder Snap Rings  
Valve Rings, All Shapes

**F. L. Morgan** has been appointed foreign freight agent of the Union Pacific at New York, effective March 1. **Sam Reinhart** has been appointed general agent at Pittsburgh, Pa., succeeding **J. D. Carter**, who will retire from active duty on February 29, under the company's pension plan.

**George C. Spahn**, division passenger agent of the Lehigh Valley at Buffalo, N. Y., has been appointed general passenger agent, with headquarters at New York, succeeding **Charles A. Barber**, whose promotion to passenger traffic manager was reported in *Railway Age* of January 31, page 76. **James R. Buckley**, division passenger agent at Ithaca, N. Y., succeeds Mr. Spahn at Buffalo. **Robert L. Sullivan**, traveling passenger agent at Ithaca, has been promoted to division passenger agent there.

**Joseph V. Maxwell**, general agent, freight department, of the Chicago, Burlington & Quincy at St. Louis, Mo., has been appointed assistant freight traffic manager of the Fort Worth & Denver City (part of the Burlington) at Houston, Tex., a newly created position.

**Ernest Leins**, city passenger agent of the Chicago, Rock Island & Pacific, at New York, has been appointed district passenger agent at that point.

**L. Duncan Stokes**, commercial agent of the Southern system at New York, has been promoted to district freight and passenger agent, with the same headquarters, succeeding **Maurice Ellingsworth**, who retired on March 1, after 47 years in transportation service.

**Robert J. Hurst**, general freight agent of the Elgin, Joliet & Eastern at Chicago, has been appointed assistant traffic manager at the point, succeeding **Louis M. Dunn**, whose death was reported in *Railway Age* of February 21. Succeeding Mr. Hurst is **Andrew J. Boucherville**, commercial agent at Chicago. **Frank J. Tichy**, also commercial agent, has been advanced to general agent, with headquarters as before at Chicago.

**Henry A. Weiss**, assistant general passenger agent of the Pennsylvania, with headquarters at Philadelphia, Pa., has been appointed traffic manager of the Long Island, with headquarters at Jamaica, N. Y., reporting to David E. Smucker, newly-appointed general manager.

## PURCHASES and STORES

**Edwin F. Lofvander**, whose promotion to assistant general purchasing agent of the Chicago, Rock Island & Pacific at Chicago was reported in *Railway Age* of February 7, was born on June 4, 1889, at Chicago. Mr. Lofvander began his railroad career with the Rock Island in 1903 as an office boy in the freight claim department, and in 1904

was transferred to the purchasing department. He subsequently held various clerical positions in that department prior to his appointment in 1924 as buyer, the post he held at the time of his recent appointment.

**Ottis O. Albritton**, assistant to vice-president in charge of purchases and stores of the Illinois Central at Chicago, has been appointed director of purchases and stores, with the same headquarters. He succeeds to the duties of **Albert C. Mann**, whose death was reported in the *Railway Age* of February 7.

## OPERATING

The Illinois Central has announced the following changes in its operating department: **W. E. Curley**, superintendent of the East St. Louis, Ill., terminal, appointed superintendent of freight service at the Chicago terminal; **J. M. O'Connor**, trainmaster at Freeport, Ill., appointed to succeed Mr. Curley; **F. A. Fitzpatrick**, trainmaster at Vicksburg, Miss., transferred to Freeport, replacing Mr. O'Connor; **F. K. Stanford**, assistant trainmaster at Carbondale, Ill., appointed trainmaster at Vicksburg; and **T. J. Reid**, superintendent of freight service at Chicago, appointed trainmaster, passenger service, including suburban, at Chicago, succeeding **J. W. Dodge**, appointed night trainmaster at Congress Street in Chicago.

**David E. Smucker**, superintendent of the Pittsburgh division of the Pennsylvania, with headquarters at Pittsburgh, Pa., has been appointed general man-



David E. Smucker

ager of the Long Island, with headquarters at Jamaica, N. Y., having entire supervision over operation, including responsibility for all traffic matters and relations with the public. **Eugene L. Hofmann** will continue as superintendent at Jamaica, reporting to Mr. Smucker. **J. C. White**, vice-president of the Long Island at New York, will continue his general supervision over the Long Island's affairs. Mr. Smucker was born at West Liberty, Ohio, on October 3, 1907, and attended the University of

Cincinnati, receiving the degree of B.S. in C.E. from Ohio State University in 1929. He entered railroad service on May 23, 1929, as assistant on the engineer corps, Philadelphia Terminal division of the Pennsylvania. On August 1, 1929, Mr. Smucker was appointed assistant supervisor track, which position he held successively on the Delaware, Philadelphia, Baltimore and Philadelphia Terminal divisions. He became supervisor track on April 9, 1934, and served successively on the Delaware and Maryland divisions. He was appointed assistant division engineer of the Fort Wayne division on June 16, 1936; division engineer of the Toledo division on October 1, 1940; and assistant superintendent freight transportation at the Chicago general office on January 16, 1942. Mr. Smucker was appointed superintendent of the Indianapolis division on January 16, 1943, being transferred to the Fort Wayne division on May 16, 1944, and to the Pittsburgh division in April, 1946.

**P. D. Robinson**, whose promotion to superintendent of transportation of the Southern Pacific at San Francisco, Cal., was reported in *Railway Age* of Febru-



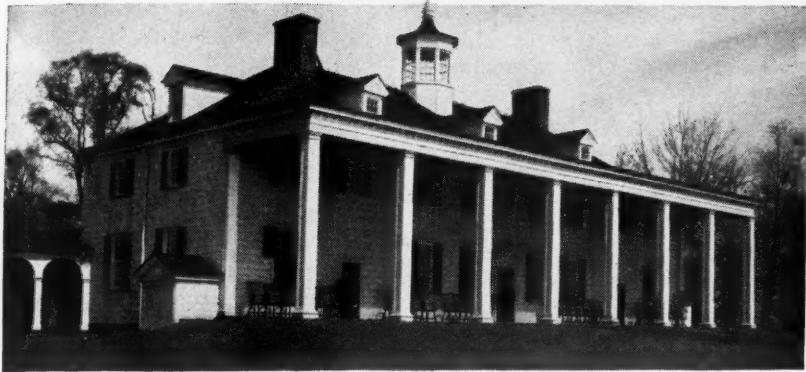
P. D. Robinson

ary 14, entered the service of the S.P. in 1936 as a mail and express handler at Los Angeles, Cal. He transferred to the operating department of the road in that same year, and subsequently held positions as brakeman, assistant trainmaster and trainmaster on various divisions of the S.P. In 1945 he was appointed assistant superintendent of the San Joaquin division at Bakersfield, Cal., which position he held at the time of his recent promotion.

**Walter O. Frame**, superintendent of the Fort Worth & Denver City (part of the Burlington Lines) at Wichita Falls, Tex., has been appointed general manager at Fort Worth, Tex., succeeding to a portion of the duties performed by **C. D. Peckenpaugh**, who has retired as vice-president and general manager. **Marvin G. Monaghan**, assistant superintendent at Amarillo, Tex., has been promoted to assistant general manager,

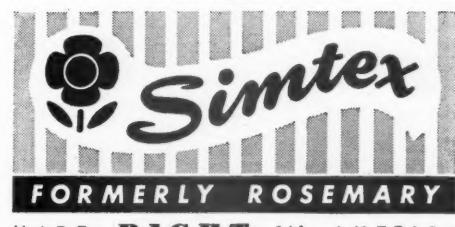
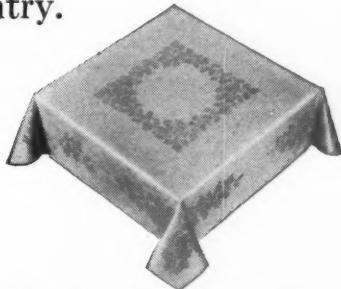
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with the same headquarters. **Harold E. Moyer**, trainmaster at Wichita Falls, has been advanced to superintendent of the F. W. & D. C. and general superintendent of Wichita Valley (also part of the Burlington Lines), with headquarters remaining at Wichita Falls. **James H. Aydelott**, trainmaster at Amarillo, has been advanced to superintendent at that point.

**George H. Baker**, general superintendent of passenger transportation of the New York Central at New York, has been appointed manager of passenger transportation of the system, succeeding **L. C. Anderson**, who has been appointed



**George H. Baker**

assistant to vice-president. **Charles E. Black**, assistant to manager passenger transportation at New York, has been appointed general superintendent of passenger transportation, succeeding Mr. Baker. All will have headquarters in New York. Mr. Baker was born at New York and entered the service of the New York Central in 1906 as a stenographer in the freight transportation office. Transferring to the



**Charles E. Black**

passenger transportation office, he was appointed passenger equipment clerk in 1918 and inspector of passenger service in 1925. He was promoted in 1935 to assistant to manager of passenger trans-

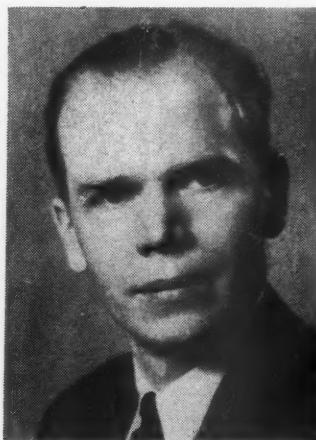
portation, and in 1941 to general superintendent of passenger transportation, which position he held at the time of his appointment as manager of passenger transportation.

Mr. Black was born at Chenango Forks, N.Y. He entered the service of the New York Central as inspector of milk service in 1919, after education at Cornell University and service as a lieutenant in the U. S. Navy during World War I. He was appointed superintendent of milk service in 1932, assistant to freight traffic manager in 1941, and later in the same year assistant to manager of passenger transportation. Mr. Black was holding the latter position at the time of his recent appointment as general superintendent of passenger transportation.

**Peter J. Ellis**, supervisor lighterage of the Lehigh Valley at Jersey City, N. J., has been appointed assistant manager of lighterage and stations, New York Harbor, with headquarters at New York, succeeding **Matthew J. Lynett**, who has retired after 30 years of service with this road.

#### ENGINEERING and SIGNALING

**R. A. Emerson**, district engineer of the Canadian Pacific at Vancouver, B.C., has been appointed engineer of track,



**R. A. Emerson**

with headquarters at Montreal, Que. In his new duties, Mr. Emerson will be responsible for the design and preparation of plans for track and roadway standards and for matters having to do with clearance for equipment and oversize loads for the entire system. Born at Plum Coulee, Man., Mr. Emerson is a graduate of the University of Manitoba and undertook post-graduate studies at Yale University in 1933-34. His career with the Canadian Pacific began permanently in 1935 as a transitman in the Kenora division, although he held temporary jobs while pursuing his education since 1928. In 1939 he became roadmaster on the Portage division and was appointed division engineer at Brandon, Man., in 1941, transferring

to Moose Jaw, Sask., in 1943. Mr. Emerson went to Vancouver in 1944, where he served successively as assistant district engineer and district engineer.

**John F. Yerger**, chief engineer, signals and communications, and **James A. Neidick**, assistant chief engineer, signals and communications of the Lehigh Valley at New York, have moved their headquarters to Bethlehem, Pa.

#### MECHANICAL

**H. H. Urbach**, mechanical assistant to the vice-president of the Burlington lines, with headquarters at Chicago, has been appointed general superintendent of motive power and machinery, with the same headquarters.

#### OBITUARY

**George B. Elliott**, retired president of the Atlantic Coast Line, died at his home in Wilmington, N. C., on February 19, at the age of 74. Mr. Elliott was born at Norfolk, Va., on March 22, 1873, and received his civil engineering degree from Virginia Military Institute in 1892 and his B. L. degree from Harvard Law School in 1896. He entered railroad service in 1892 as assistant resident engineer of the Chesapeake & Ohio, going with the Atlantic Coast Line in 1896, as special attorney. He was appointed assistant general counsel in 1906; general counsel in 1916; and vice-president and general counsel in 1918, all with the A.C.L. Mr. Elliott served as president of the A.C.L. from 1928 until October 15, 1942, when he was relieved of his duties as president, at his own request, but continued with the road for a couple of years as chairman of the executive committee.

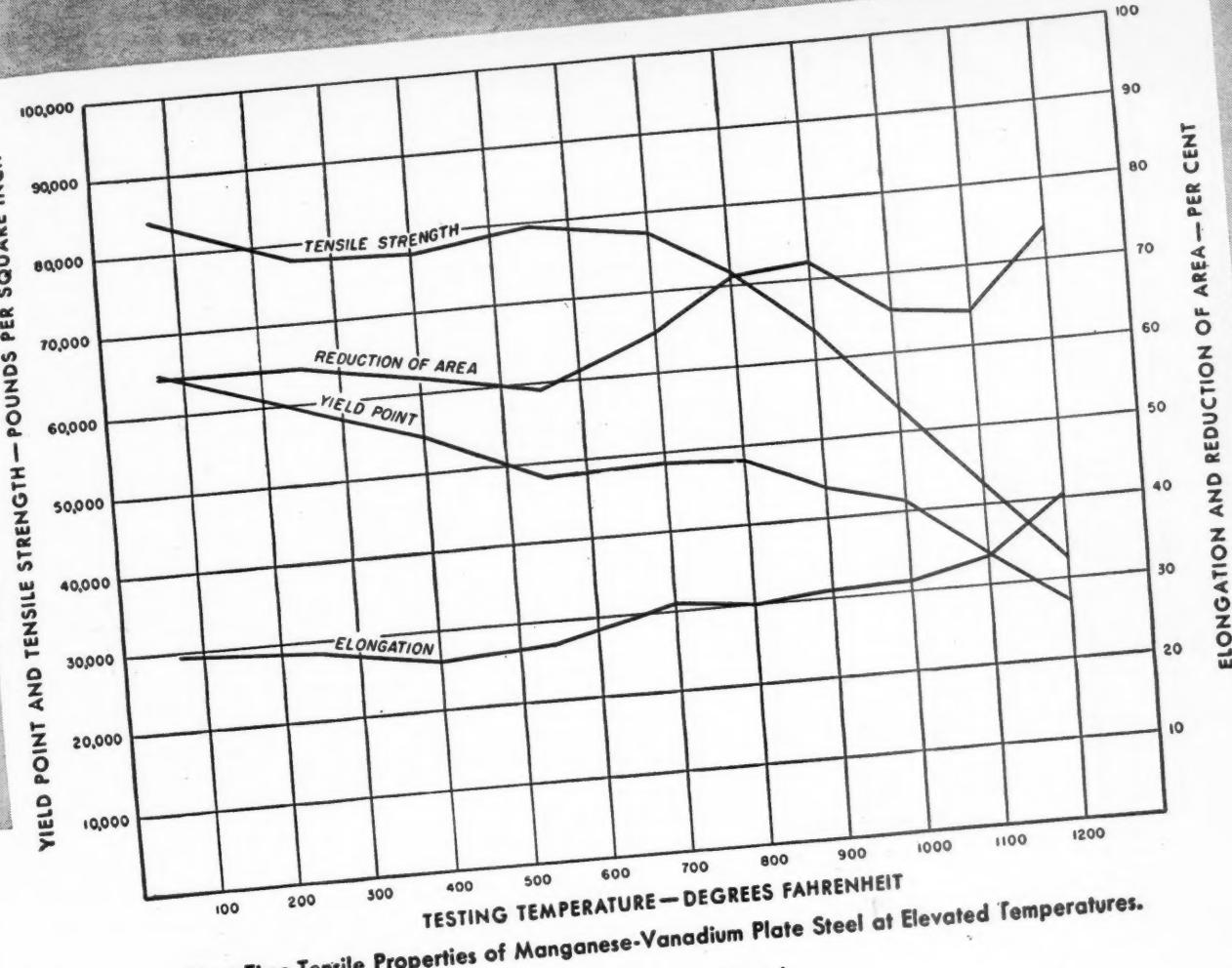
**Thomas M. Schumacher**, who retired three years ago as trustee and chairman of the executive committee of the Western Pacific, died on February 26 at his home in New York, at the age of 86.

**H. L. Bunn**, assistant engineer of the Texas & Pacific at Alexandria, La., died on January 28 in the T. & P. hospital at Marshall, Tex., following a brief illness.

**Arthur G. Hagemann**, general agent, freight department, of the New York Central, with headquarters at Davenport, Iowa, died in that city on February 23.

**Fred Lawrence Thompson**, who retired in 1942 as vice-president in charge of engineering of the Illinois Central, died at his home in Chicago on February 27, following a short illness.

**Arthur U. Sawbridge**, district passenger agent of the Illinois Central at Chicago, died suddenly on February 27 while dining at the Illinois Athletic Club in Chicago.



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## Current Publications

### ARTICLES IN PERIODICALS

*Passenger Department Sharpshooters*, by W. E. Meuse. *Baltimore & Ohio Magazine*, November, 1947, pp. 6-9 and 15. Published by the Baltimore & Ohio Railroad, Baltimore, Md.

Mr. Meuse describes briefly the passenger department sales training program which he instituted on the Baltimore & Ohio.

*Helping People To Work Together*, by J. F. Blair, assistant general auditor, Chicago, *Burlington & Quincy American Business*, November, 1947, page 26-30. Dartnell Publications, Inc., 4660 Ravenswood Ave., Chicago 40. Single copies 35 cents.

A scholarly and general discussion of the philosophy of management, with delineation of, and emphasis on, basic principles. The author does not draw upon experiences of his railroad for illustrations, nor is the article devoted to any particular type of corporation.

"What Makes Acey Moore Happy," by Ronald Schiller, "48", February, 1948, pp. 50-63. Single copies, 35 cents.

This is a popular profile sketch of a veteran passenger conductor on the Central Vermont and is rather better than most pieces of this type in point of accuracy and depth of focus.

*N. Y. Central's Public Relations*. Tide, February 13, 1948, pp. 17-19. Published by Tide Publishing Company, 232 Madison Ave., New York 16. Single copies, 25 cents.

The Central's long-range public relations program, based largely on a comprehensive employee-training program, gets the lead position in this issue of Tide. The program is being developed under the supervision of L. W. Horning, vice-president in charge of personnel and public relations (whose photograph, incidentally, graces the cover of this issue). The personnel program is handled by John G. Castle, assistant to the vice-president, and the non-personnel aspects, by Clarence R. Dugan, manager of public relations. The article includes a discussion of the training course and other training techniques employed in employee-training, and the use of films, posters, booklets, etc., employed in telling the railroad's story to the public.

*Argentine Railway Developments: Fundamental Changes Occurring*, by Joseph L. Apodaca and Vincent Russo. *Foreign Commerce Weekly*, January 24, 1948, pp. 3-4, 32-34. Available from the Government Printing Office, Washington 25, D.C. Single copies, fifteen cents.

The financial operations, traffic, and condition of rolling stock of the Argentine railways from 1941 to 1946 are discussed in this article. The privileges and prerogatives enjoyed by foreign-owned railways during the past 40 years under the Mitre Law, which expired on December 31, 1946, are explained, and this, and other contrib-

uting factors to the sale of the British- and French-owned railways are noted. The terms of agreements under which these railways were purchased are also given.

*India's Railways Look to Future as Partition Poses Problems*, by Joe D. Walsstrom. *Foreign Commerce Weekly*, January 24, 1948, pp. 5 and 31-32. Available from the Government Printing Office, Washington 25, D.C. Price, fifteen cents.

Difficulties created by the division of the rail system between India and Pakistan are noted herein. They include division of assets and liabilities, transfer of personnel, and location of workshops. New passenger fares and freight rates which went into effect on January 1 are discussed, as well as new developments under way.

### BOOKS

*The Tools of the Traffic Man*, by Edward A. Starr. 243 pages. Published by the Transportation Press, P.O. Box 381, Dallas 1, Texas. Price \$3.

The publications used by the traffic man are the subject of this book, its purpose being, among other things, to assist the beginner in bridging the gap between the theoretical and the practical aspects of such publications, and also to offer an overall picture of the different kinds used in connection with the transportation of property. The author discusses the scope of traffic or transportation publications, the evolution of the transportation publication, territorial guides and directories, and then devotes the next 21 chapters to freight tariffs. Succeeding chapters cover publications concerning railroad rolling stock, freight claims, and transportation law and carrier regulation, express tariffs, domestic parcel post and air transportation.

*Directory of Safety, First-Aid, Hygiene and Fire Protective Products*, 1948 (Second Annual Edition). 494 pages. Published by Alfred M. Best Company, 75 Fulton St., New York 7. Price \$5.00.

An illustrated directory of safety products and products designed to reduce hazard and improve industrial practices. While not specifically directed to the railroads, this directory includes many products regularly used by them—particularly mechanical handling equipment—and contains complete indexes, alphabetically by products and geographically by distributors.

*A Practical Evaluation of Railroad Motive Power*, by P. W. Kiefer. 65 pages, illustrations, charts. Published by the Steam Locomotive Research Institute, Inc., New York. Available from the Simmons-Boardman Publishing Corporation, 30 Church St., New York 7. Price \$2.

Mr. Kiefer was invited to speak on the subject of "Railway Power Plant from the United States' Point of View" before the Institution of Mechanical Engineers, London, England, during the centenary celebrations of that Institution held June 8 to 13, 1947. This book contains the very detailed and authoritative evaluation of the various types of locomotives he presented. Based largely on developments on the New

York Central, of which Mr. Kiefer is chief engineer motive power and rolling stock, the discussion outlines the fundamentals of economic value and utility that must be determining in such a consideration of different designs, and then applies these fundamentals to the modern steam reciprocating locomotive, the straight electric, and the Diesel-electric. An abstract of this study appeared in the *Railway Age* of August 23 and August 30, 1947.

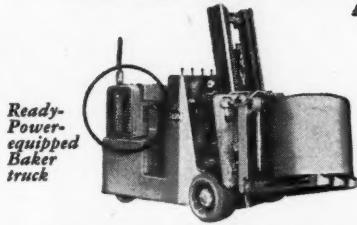
*New Departure in Freight Rate Making*, by G. Lloyd Wilson. 158 pages. Published by the Simmons-Boardman Publishing Corporation, 30 Church st., New York 7. Price, \$3.

Based on a series of articles in *Railway Age*, this book is an analysis of British and Canadian "agreed rates" and other special charges, and of the basic principles which should be considered by shippers and carriers in this country to obtain a more equitable freight rate structure. An introductory chapter on our freight rate structure affords a historic background for appraising the feasibility of "agreed rates."

*Interterritorial Freight Rates; A symposium appearing in the Summer, 1947, issue of Law and Contemporary Problems (Vol. XII, No. 3). Published by the School of Law, Duke University, Durham, N. C.* Price \$1.

This issue of "Law and Contemporary Problems" is devoted entirely to articles dealing with international freight rates, written by people familiar with the subject, both pro and con. Among the authors are John Dickinson of the Pennsylvania, Sidney S. Alderman of the Southern, Robert R. Young of the Chesapeake & Ohio, Professors D. Philip Locklin and Stuart Daggett, and Wendell Berge and Arne C. Wiprud, both formerly of the Department of Justice. There are articles on the rate structure, historical development of the Eastern-Southern freight rate relationships, the rate-making process, rate conferences, etc. Although most of the papers were written before the Supreme Court handed down its decisions in the class rate case, they still provide a wealth of information helpful to an understanding of that case and the anti-trust cases now pending against the railroads. Brainerd Currie, the editor of the publication, in his foreword says, "The aim of this symposium is to find answers to as many as possible of the questions which confront one who seeks to be informed on these matters. To a substantial degree this aim has been attained in the group of articles which follows. Not that the contradictions mentioned have been dissipated; partisan viewpoints are represented, and disagreements are sharp. But the materials necessary for the formation of a critical judgment are here. To be sure, conclusions will not always be suspended ripe for the plucking. The discriminating reader, however, will find guides, familiar to triers of fact, in his appraisal of the interests involved, in the candor and completeness with which issue is joined, and in the inferences which can be drawn from undisputed facts."

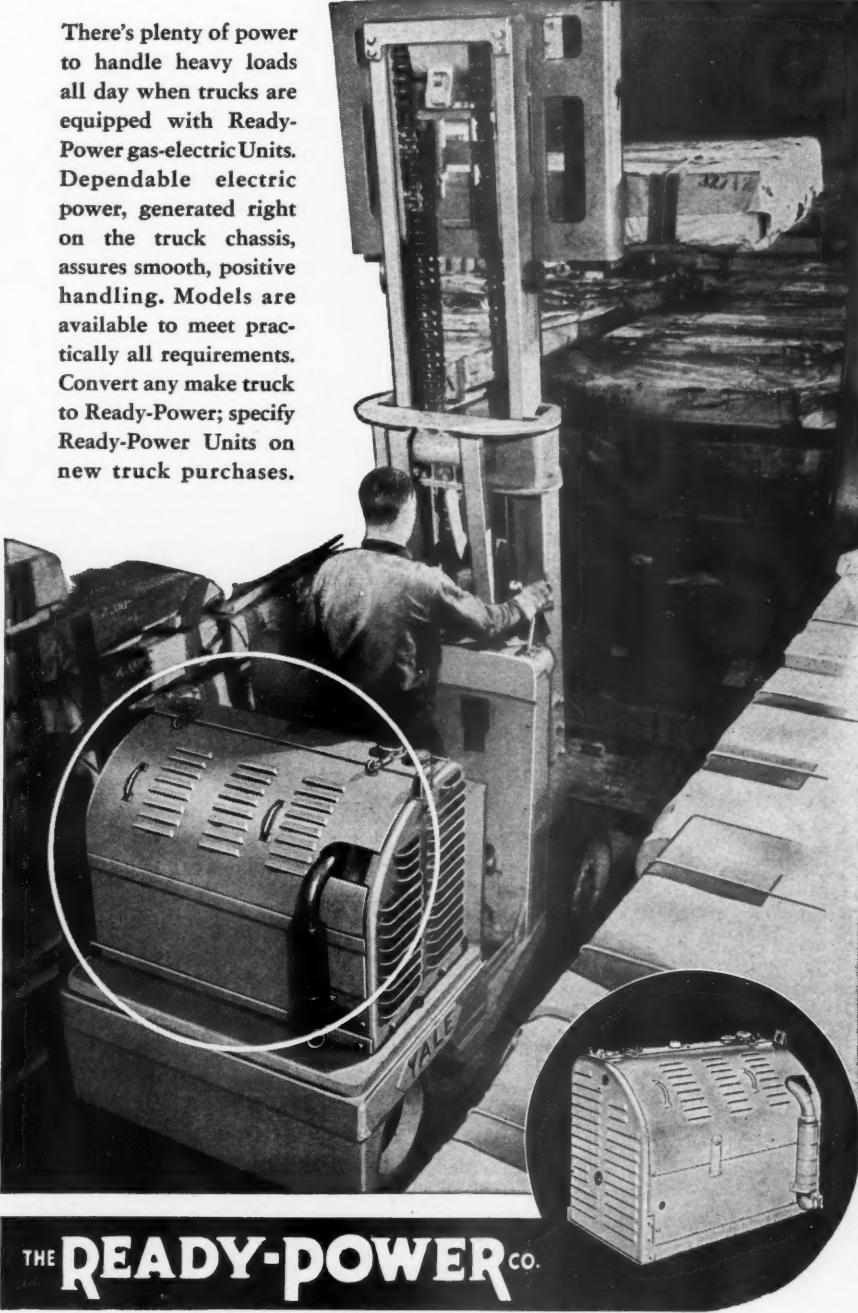
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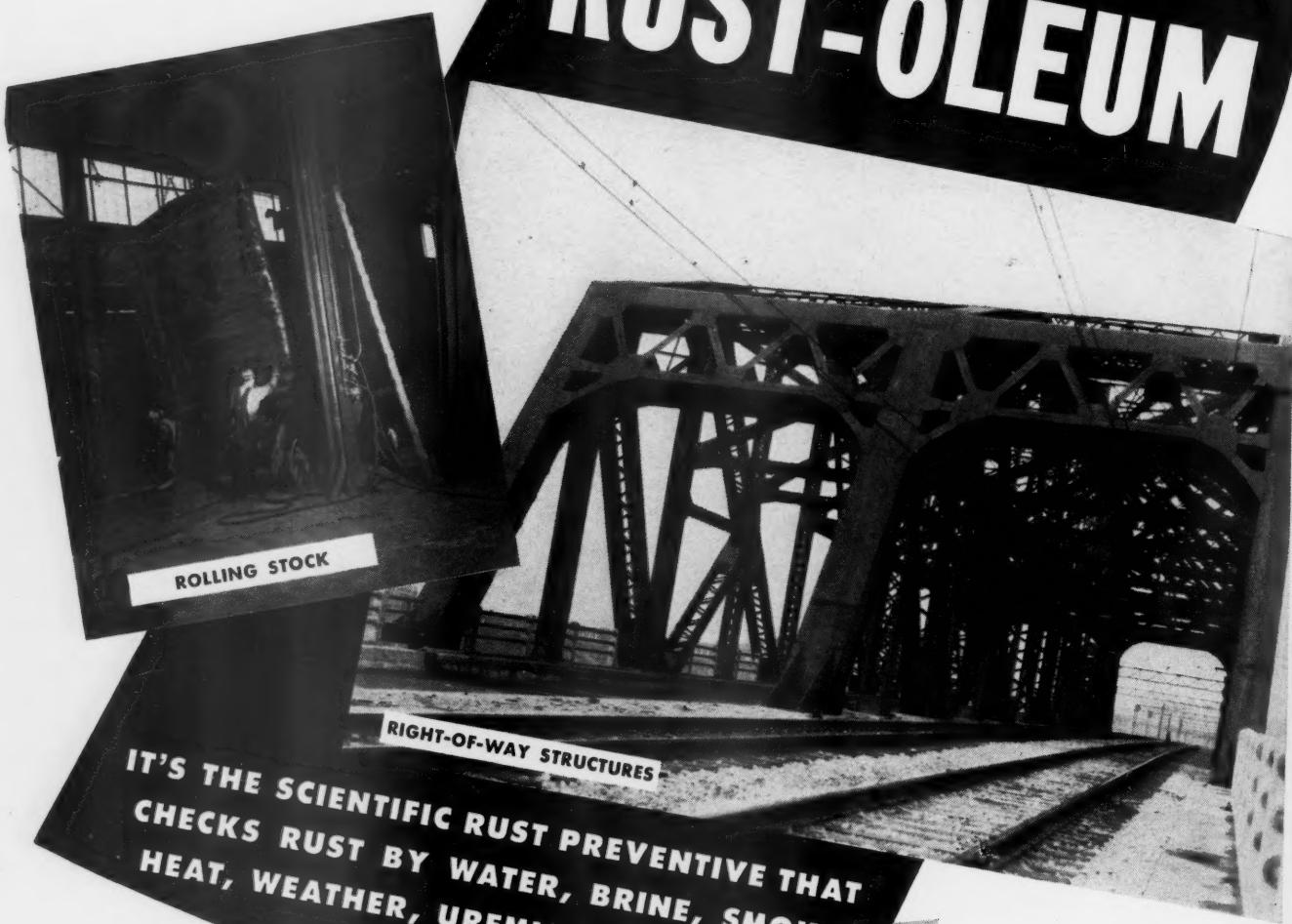


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